

8. RADIATED TEST RESULTS

8.1. LIMITS AND PROCEDURE

LIMITS

FCC §15.205 and §15.209

IC RSS-GEN, Section 8.9 and 8.10.

Frequency Range (MHz)	Field Strength Limit (uV/m) at 3 m	Field Strength Limit (dBuV/m) at 3 m
30 - 88	100	40
88 - 216	150	43.5
216 - 960	200	46
Above 960	500	54

TEST PROCEDURE

The EUT is placed on a non-conducting table 80 cm above the ground plane for measurement below 1GHz; 1.5 m above the ground plane for measurement above 1GHz. The antenna to EUT distance is 3 meters. The EUT is configured in accordance with ANSI C63.10. The EUT is set to transmit in a continuous mode.

For measurements below 1 GHz the resolution bandwidth is set to 100 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

For pre-scans above 1 GHz the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 30 KHz for peak measurements.

For final scans above 1 GHz the resolution bandwidth is set to 1 MHz, then the video bandwidth is set to 3 MHz for peak measurements and 1 MHz resolution bandwidth with 1/T (10 Hz) video bandwidth with peak detector for average measurements.

The spectrum from 30 MHz to 26 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in the 2.4 GHz band.

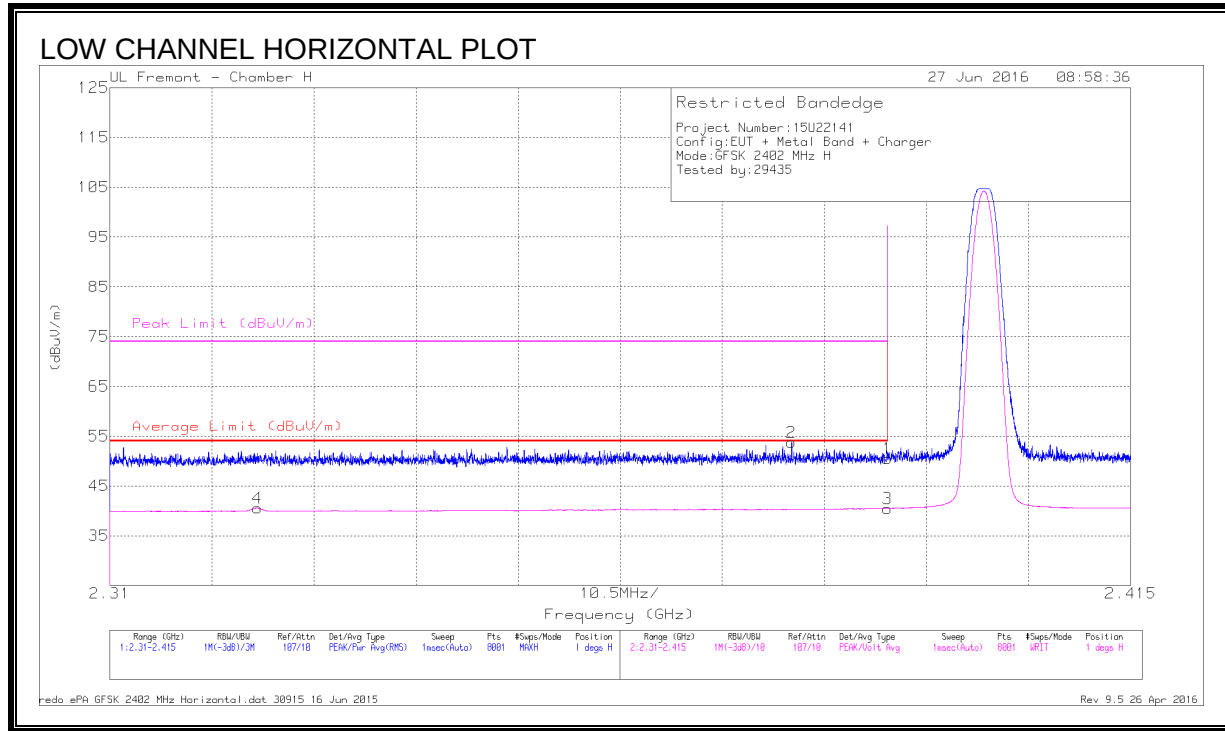
The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized in both the vertical and the horizontal positions.

RESULTS

8.2. ABOVE 1 GHz

8.2.1. HIGH POWER BASIC DATA RATE GFSK MODULATION

RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)



DATA

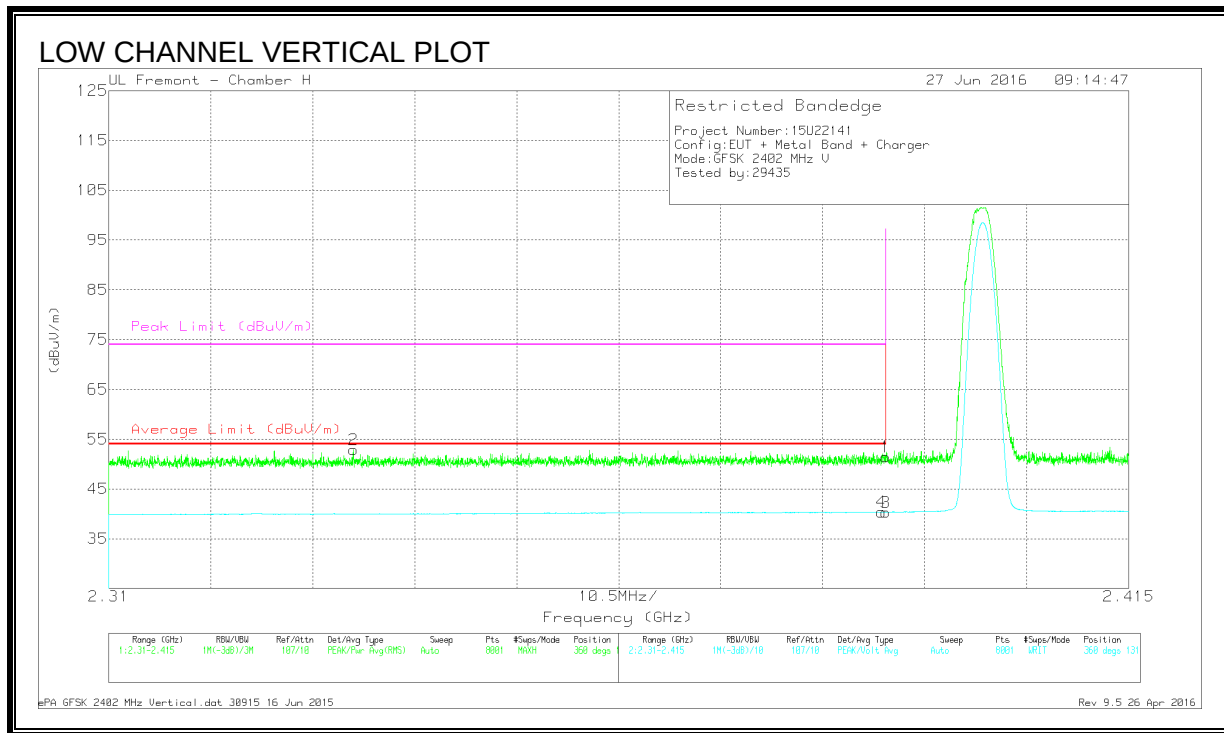
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Ftr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	39.31	Pk	32.1	-20.9	50.51	-	-	74	-23.49	1	130	H
2	* 2.38	42.54	Pk	32.1	-20.9	53.74	-	-	74	-20.26	1	130	H
3	* 2.39	29.25	VA1T	32.1	-20.9	40.45	54	-13.55	-	-	1	130	H
4	* 2.325	29.66	VA1T	31.8	-20.9	40.56	54	-13.44	-	-	1	130	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)



DATA

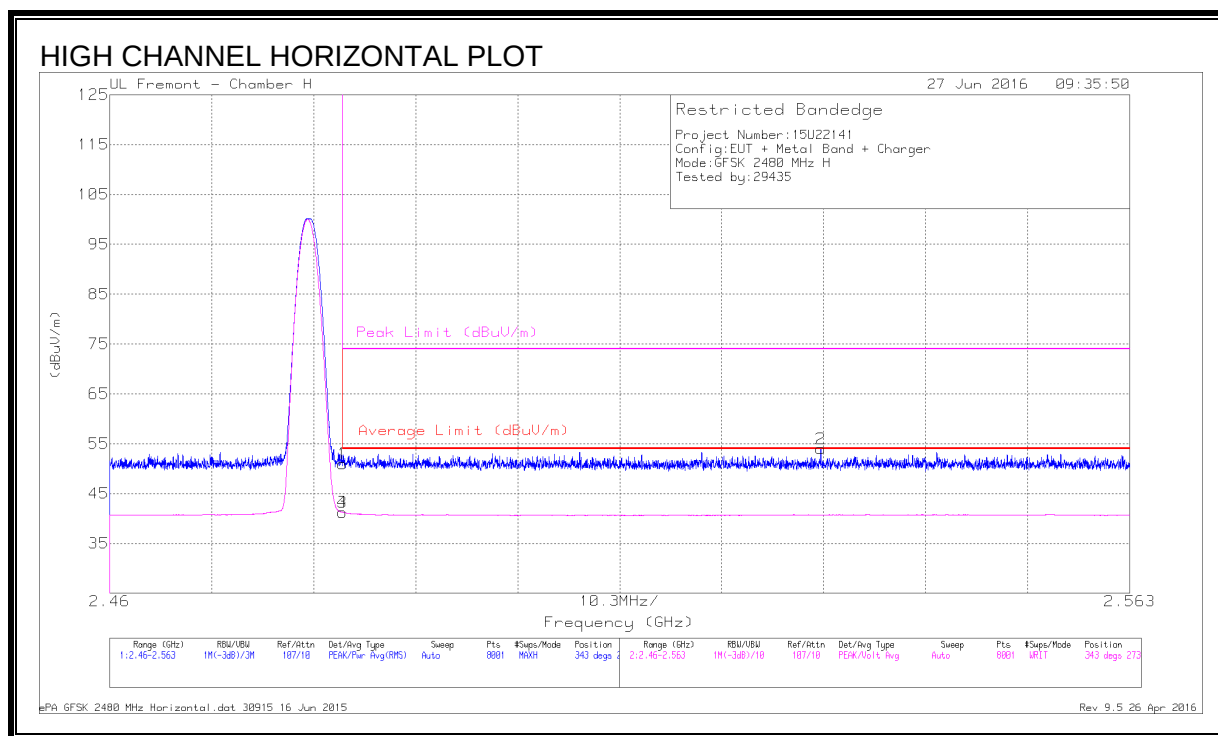
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	40.24	Pk	32.1	-20.9	51.44	-	-	74	-22.56	360	131	V
2	* 2.335	41.86	Pk	31.9	-20.9	52.86	-	-	74	-21.14	360	131	V
3	* 2.39	29.12	VA1T	32.1	-20.9	40.32	54	-13.68	-	-	360	131	V
4	* 2.39	29.18	VA1T	32.1	-20.9	40.38	54	-13.62	-	-	360	131	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)



DATA

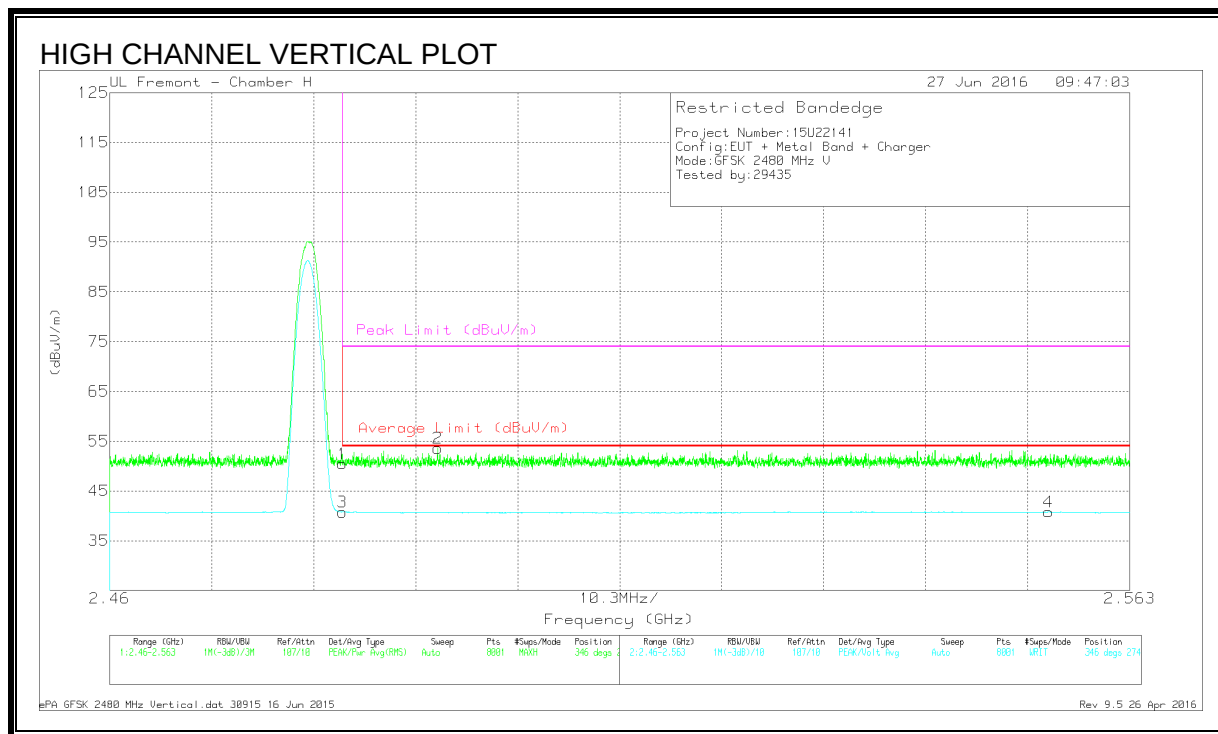
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1	* 2.484	39.7	Pk	32.3	-21	51	-	-	74	-23	343	273	H
2	2.532	42.59	Pk	32.3	-20.9	53.99	-	-	74	-20.01	343	273	H
3	* 2.484	29.95	VA1T	32.3	-21	41.25	54	-12.75	-	-	343	273	H
4	* 2.484	29.95	VA1T	32.3	-21	41.25	54	-12.75	-	-	343	273	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)



DATA

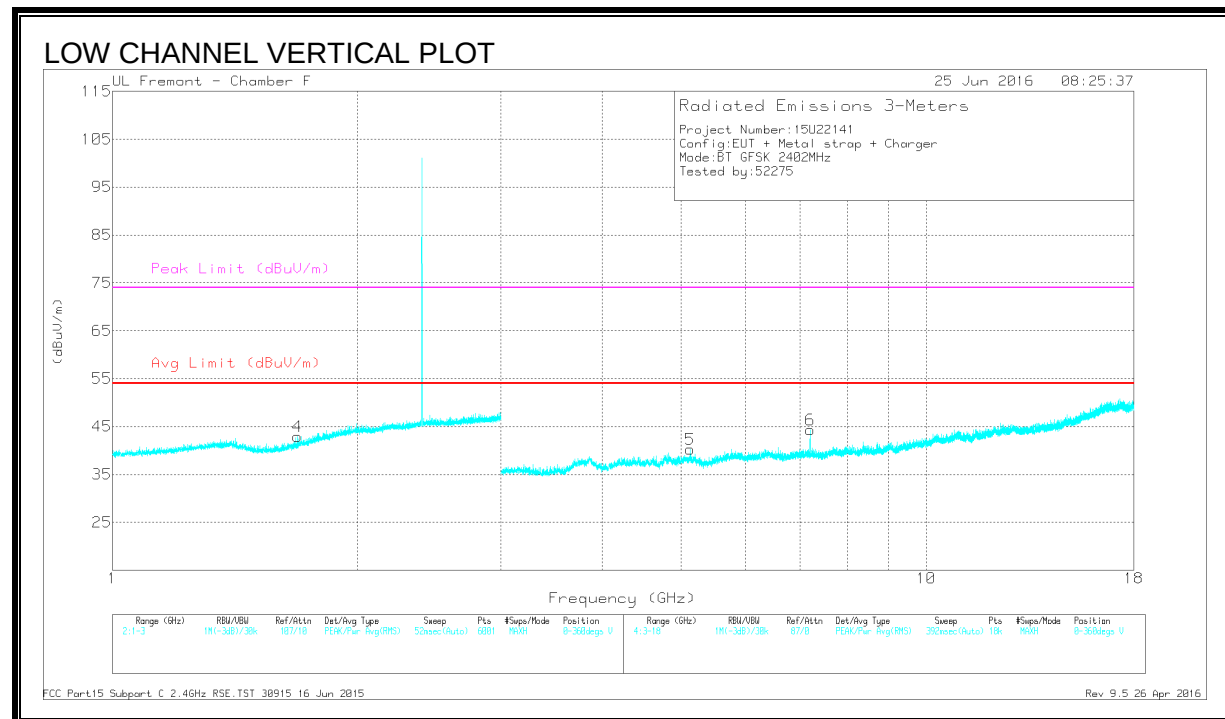
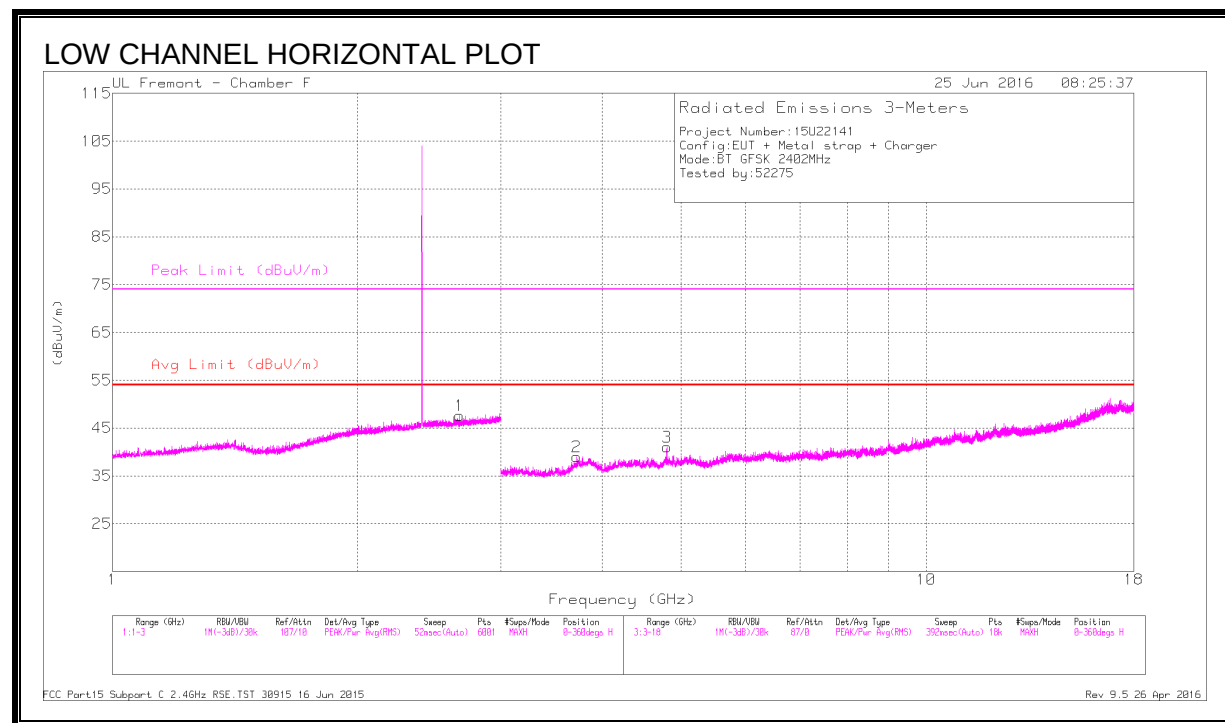
Marker	Frequency (GHz)	Meter Reading (dBUV)	Det	AF T344 (dB/m)	Amp/Cbl/Filtr/Pa d (dB)	Corrected Reading (dBUV/m)	Average Limit (dBUV/m)	Margin (dB)	Peak Limit (dBUV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	39.15	Pk	32.3	-21	50.45	-	-	74	-23.55	346	274	V
2	* 2.493	42.18	Pk	32.3	-20.9	53.58	-	-	74	-20.42	346	274	V
3	* 2.484	29.46	VA1T	32.3	-21	40.76	54	-13.24	-	-	346	274	V
4	2.555	29.49	VA1T	32.2	-20.9	40.79	54	-13.21	-	-	346	274	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

HARMONICS AND SPURIOUS EMISSIONS



DATA

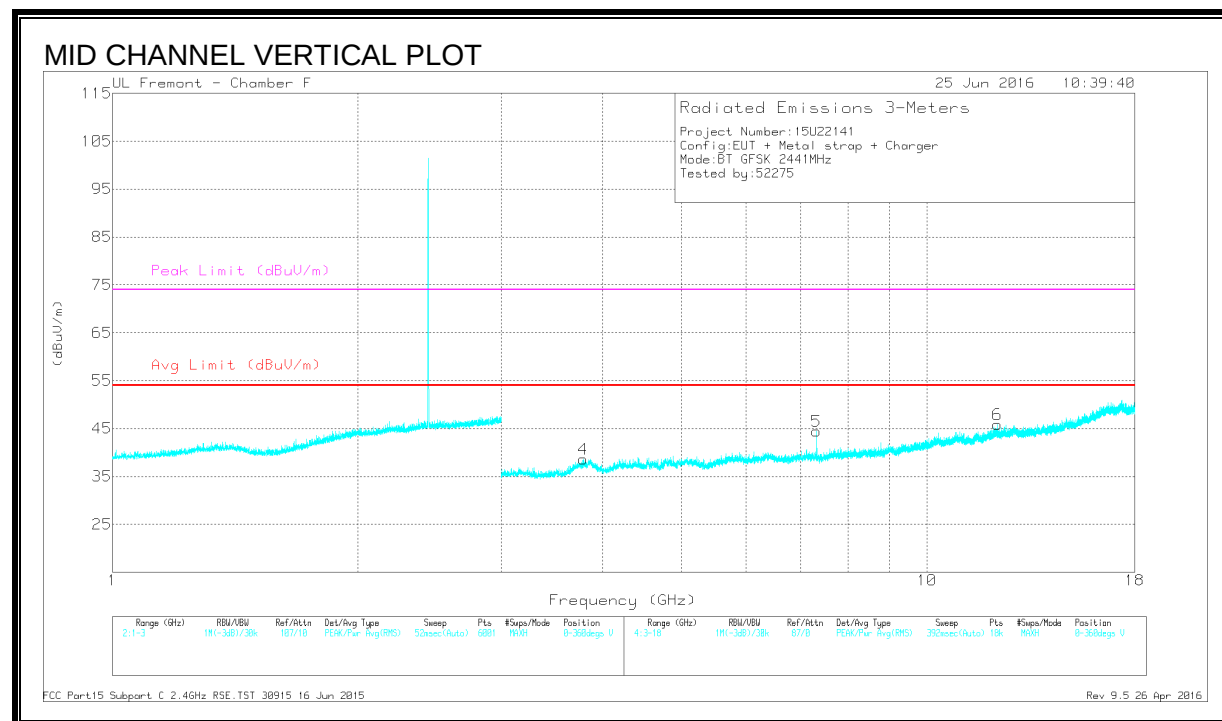
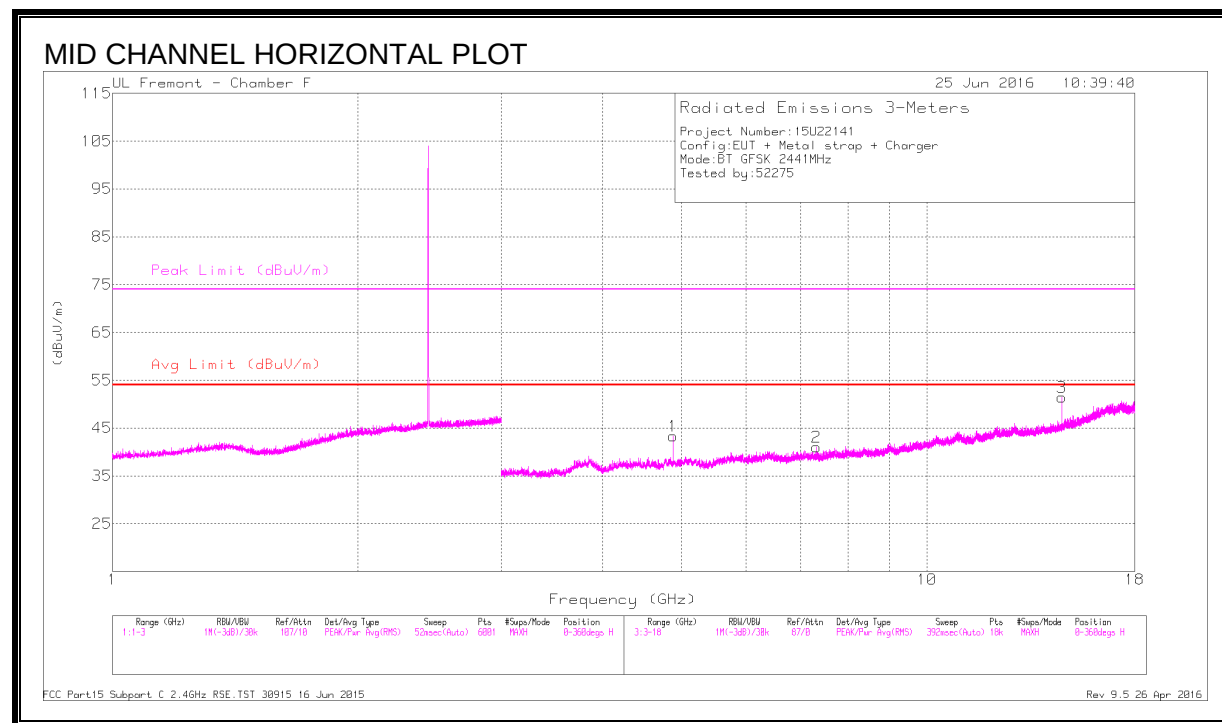
	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Filtr/P ad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.67	40.18	PKFH	32.3	-20.7	51.78	-	-	74	-22.22	117	200	H
	* 2.671	29.18	VA1T	32.3	-20.7	40.78	54	-13.22	-	-	117	200	H
4	* 1.69	41.28	PKFH	29	-21.8	48.48	-	-	74	-25.52	117	200	V
	* 1.691	29.21	VA1T	29	-21.8	36.41	54	-17.59	-	-	117	200	V
3	* 4.802	38.66	PKFH	34	-27.6	45.06	-	-	74	-28.94	161	117	H
	* 4.802	29.87	VA1T	34	-27.6	36.27	54	-17.73	-	-	161	117	H
2	* 3.722	38.59	PKFH	33.4	-29.3	42.69	-	-	74	-31.31	117	200	H
	* 3.721	27.18	VA1T	33.4	-29.3	31.28	54	-22.72	-	-	117	200	H
6	7.203	39.97	PKFH	35.6	-26.4	49.17	-	-	-	-	117	238	V
	7.203	31.21	VA1T	35.6	-26.4	40.41	-	-	-	-	117	238	V
5	* 5.134	36.43	PKFH	34.2	-27	43.63	-	-	74	-30.37	117	200	V
	* 5.132	25.48	VA1T	34.2	-27	32.68	54	-21.32	-	-	117	200	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

HARMONICS AND SPURIOUS EMISSIONS



DATA

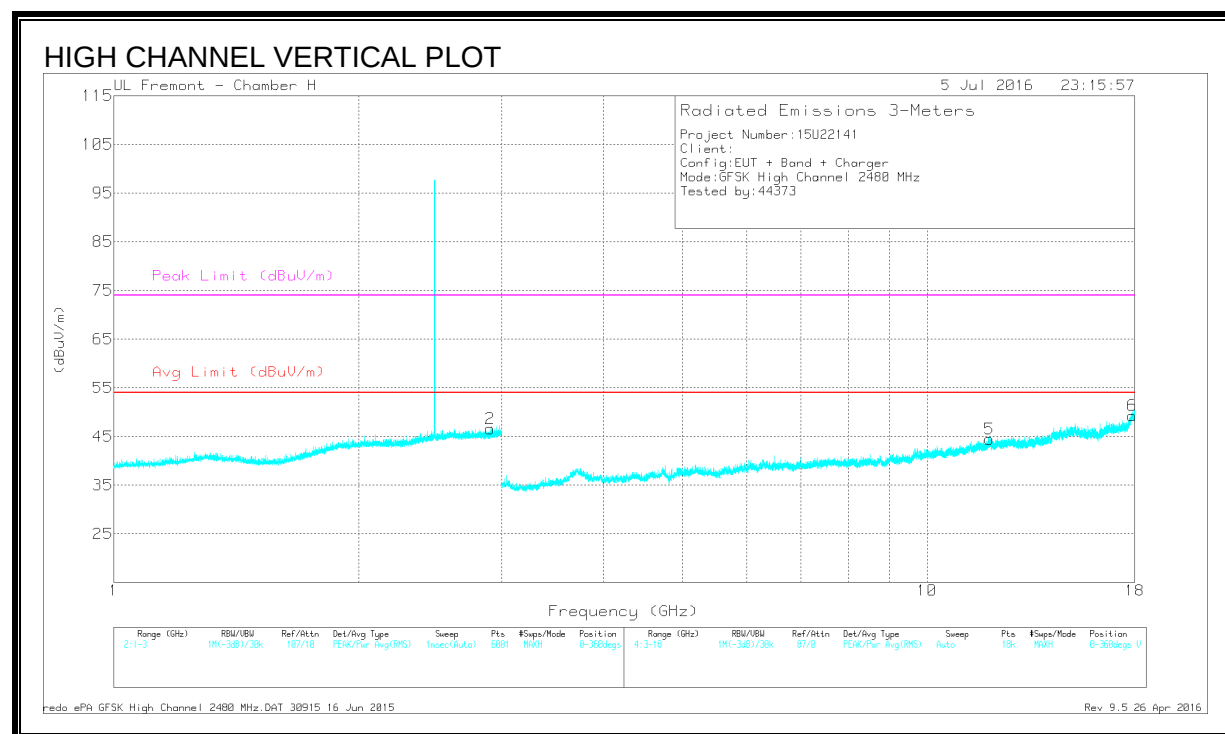
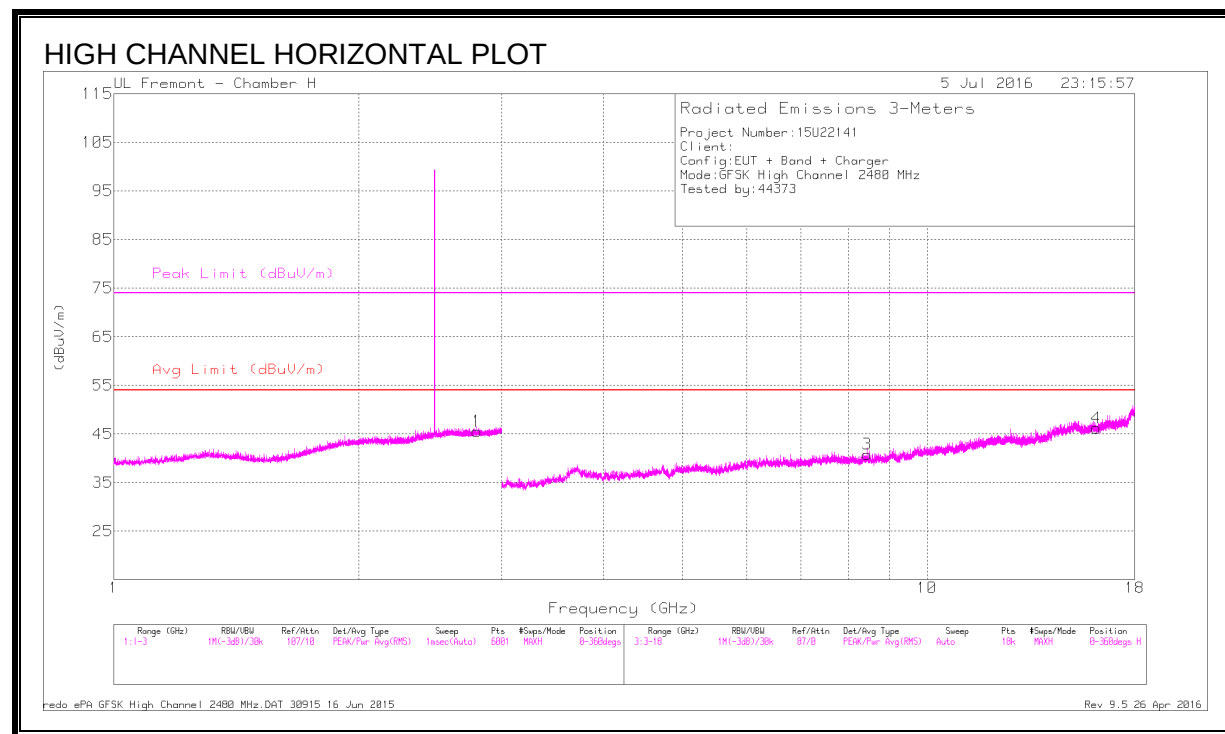
	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Fitr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 4.882	41.05	PKFH	34.1	-27.8	47.35	-	-	74	-26.65	332	101	H
	* 4.882	34.55	VA1T	34.1	-27.8	40.85	54	-13.15	-	-	332	101	H
3	14.647	40.29	PKFH	39.7	-23.2	56.79	-	-	-	-	327	100	H
	14.647	31.21	VA1T	39.7	-23.2	47.71	-	-	-	-	327	100	H
2	* 7.322	37.17	PKFH	35.6	-26.5	46.27	-	-	74	-27.73	292	201	H
	* 7.323	27.45	VA1T	35.6	-26.5	36.55	54	-17.45	-	-	292	201	H
5	* 7.322	39.96	PKFH	35.6	-26.5	49.06	-	-	74	-24.94	292	220	V
	* 7.323	32.67	VA1T	35.6	-26.5	41.77	54	-12.23	-	-	292	220	V
4	* 3.784	37.6	PKFH	33.4	-28.9	42.1	-	-	74	-31.9	292	201	V
	* 3.782	26.5	VA1T	33.4	-28.9	31	54	-23	-	-	292	201	V
6	* 12.204	35.57	PKFH	38.9	-22	52.47	-	-	74	-21.53	292	201	V
	* 12.205	24.73	VA1T	38.9	-22	41.63	54	-12.37	-	-	292	201	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

HARMONICS AND SPURIOUS EMISSIONS



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Filtr/P ad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.799	41.36	PKFH	32.7	-23.6	50.46	-	-	74	-23.54	307	122	H
1	* 2.797	30.67	VA1T	32.7	-23.6	39.77	54	-14.23	-	-	307	122	H
3	* 8.44	40.34	PKFH	35.8	-28.4	47.74	-	-	74	-26.26	356	378	H
3	* 8.441	27.9	VA1T	35.8	-28.4	35.3	54	-18.7	-	-	356	378	H
4	* 16.151	37.42	PKFH	41.1	-25.6	52.92	-	-	74	-21.08	333	248	H
4	* 16.151	25.99	VA1T	41.1	-25.6	41.49	54	-12.51	-	-	333	248	H
5	* 11.931	36.9	PKFH	38.9	-25.6	50.2	-	-	74	-23.8	150	302	V
5	* 11.93	25.36	VA1T	38.9	-25.6	38.66	54	-15.34	-	-	150	302	V
6	* 17.869	36.1	PKFH	42.1	-21.7	56.5	-	-	74	-17.5	47	395	V
6	* 17.868	24.26	VA1T	42.1	-21.7	44.66	54	-9.34	-	-	47	395	V
2	2.902	30.98	VA1T	32.5	-23.4	40.08	-	-	-	-	289	175	V
2	2.906	42.61	PKFH	32.6	-23.4	51.81	-	-	-	-	289	175	V

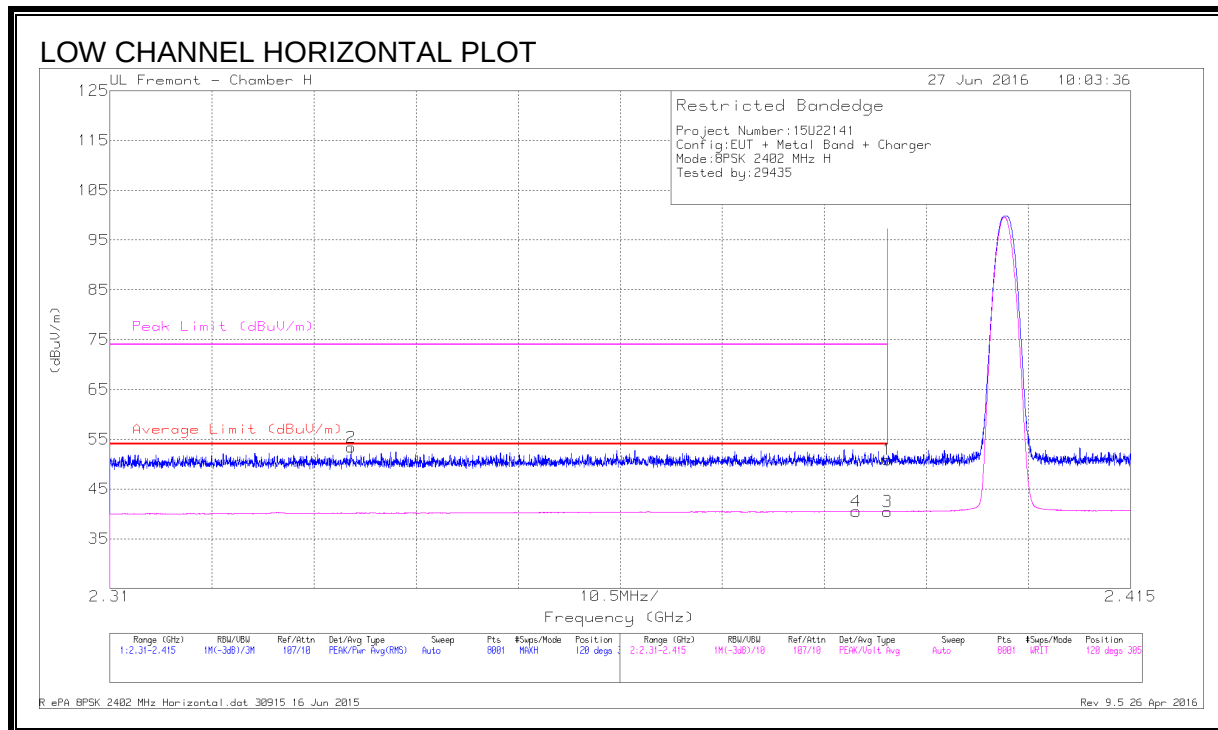
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

8.2.2. HIGH POWER ENHANCED DATA RATE 8PSK MODULATION

RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)



DATA

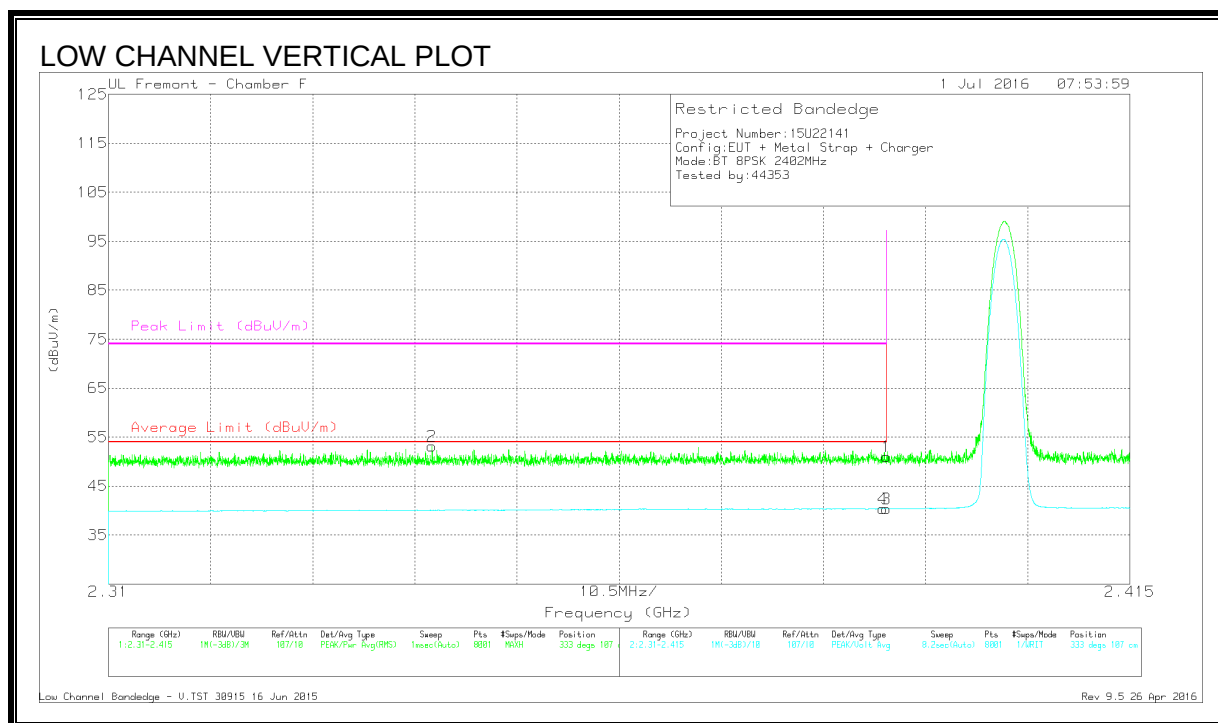
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1	* 2.39	39.68	Pk	32.1	-20.9	50.88	-	-	74	-23.12	120	305	H
2	* 2.335	42.37	Pk	31.9	-20.9	53.37	-	-	74	-20.63	120	305	H
3	* 2.39	29.27	VA1T	32.1	-20.9	40.47	54	-13.53	-	-	120	305	H
4	* 2.387	29.31	VA1T	32.1	-20.9	40.51	54	-13.49	-	-	120	305	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)



DATA

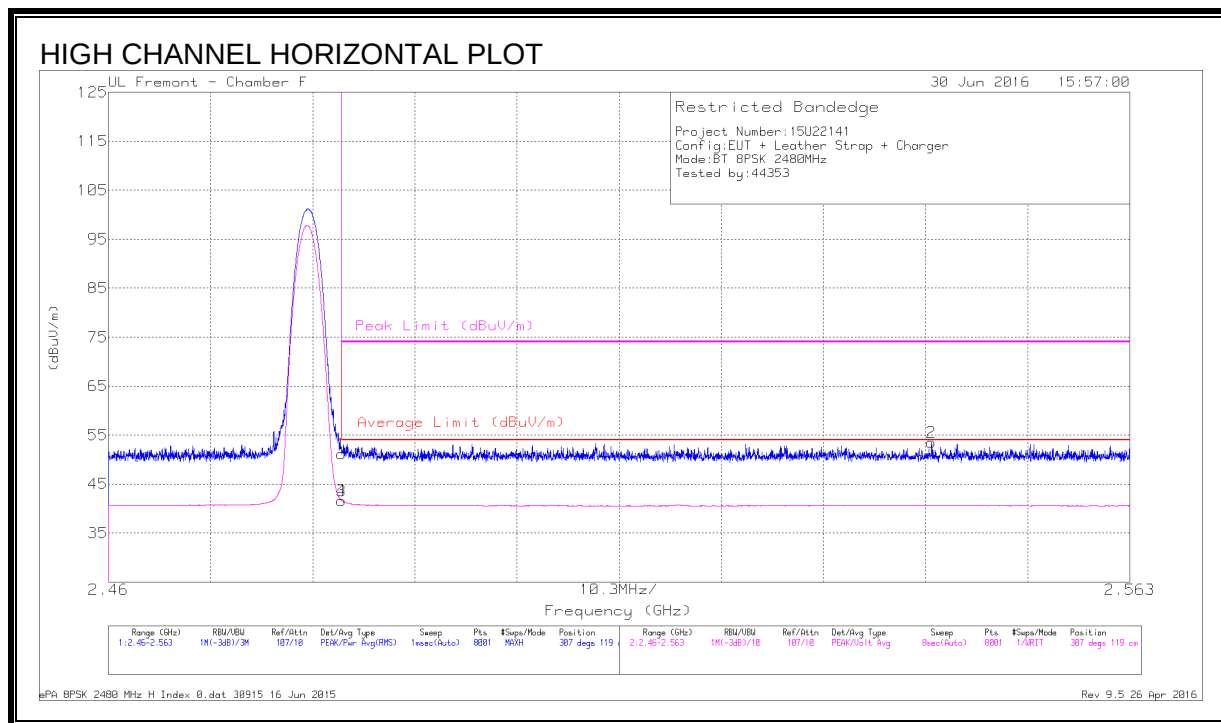
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Filtr/Par d (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	39.8	Pk	32.1	-20.9	51	-	-	74	-23	333	107	V
2	* 2.343	42.24	Pk	31.9	-21	53.14	-	-	74	-20.86	333	107	V
3	* 2.39	29.14	VA1T	32.1	-20.9	40.34	54	-13.66	-	-	333	107	V
4	* 2.39	29.2	VA1T	32.1	-20.9	40.4	54	-13.6	-	-	333	107	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average $V_B = 1/T_{on}$ where: T_{on} is transmit duration

RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)



DATA

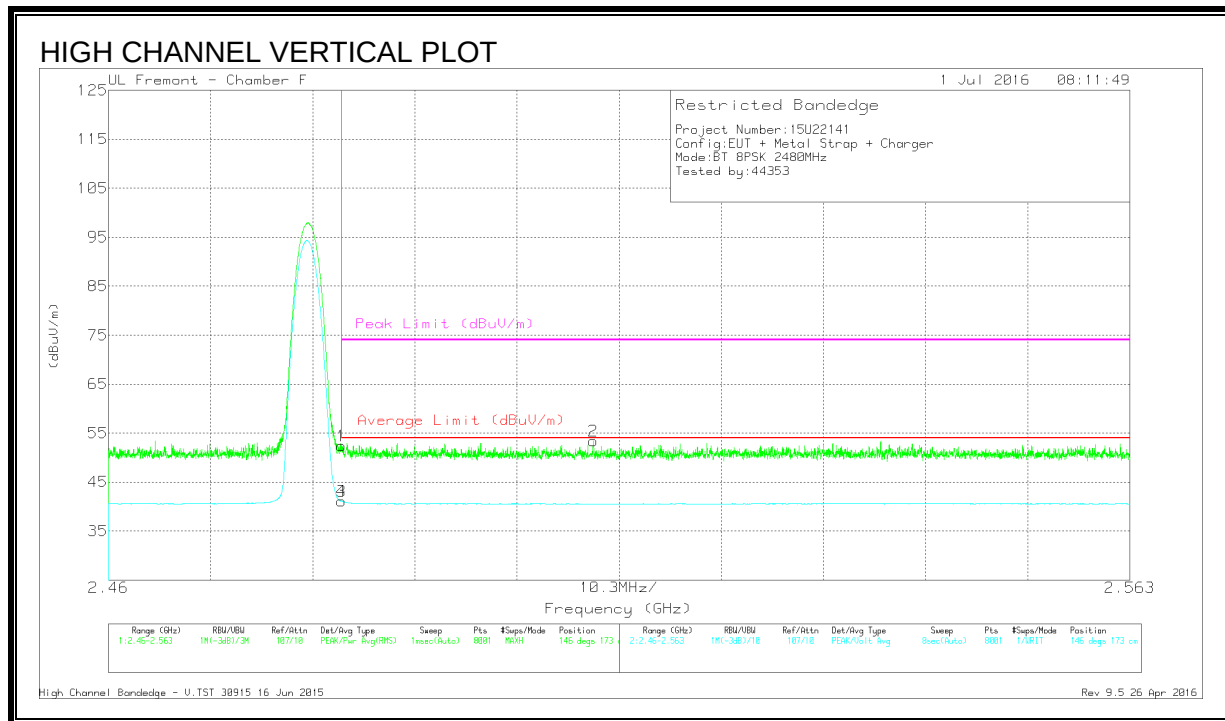
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Filt/Pa d (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	39.88	Pk	32.3	-21	51.18	-	-	74	-22.82	307	119	H
2	2.543	42.2	Pk	32.2	-20.9	53.5	-	-	74	-20.5	307	119	H
3	* 2.484	30.32	VA1T	32.3	-21	41.62	54	-12.38	-	-	307	119	H
4	* 2.484	30.33	VA1T	32.3	-21	41.63	54	-12.37	-	-	307	119	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)



DATA

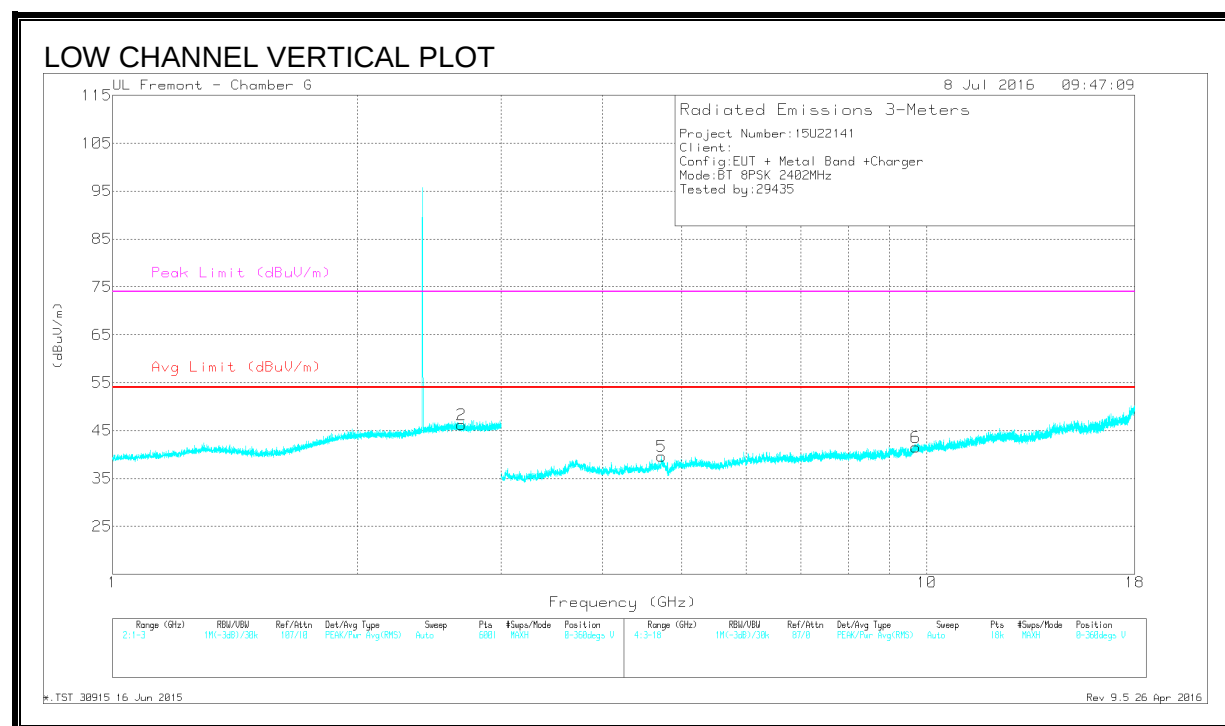
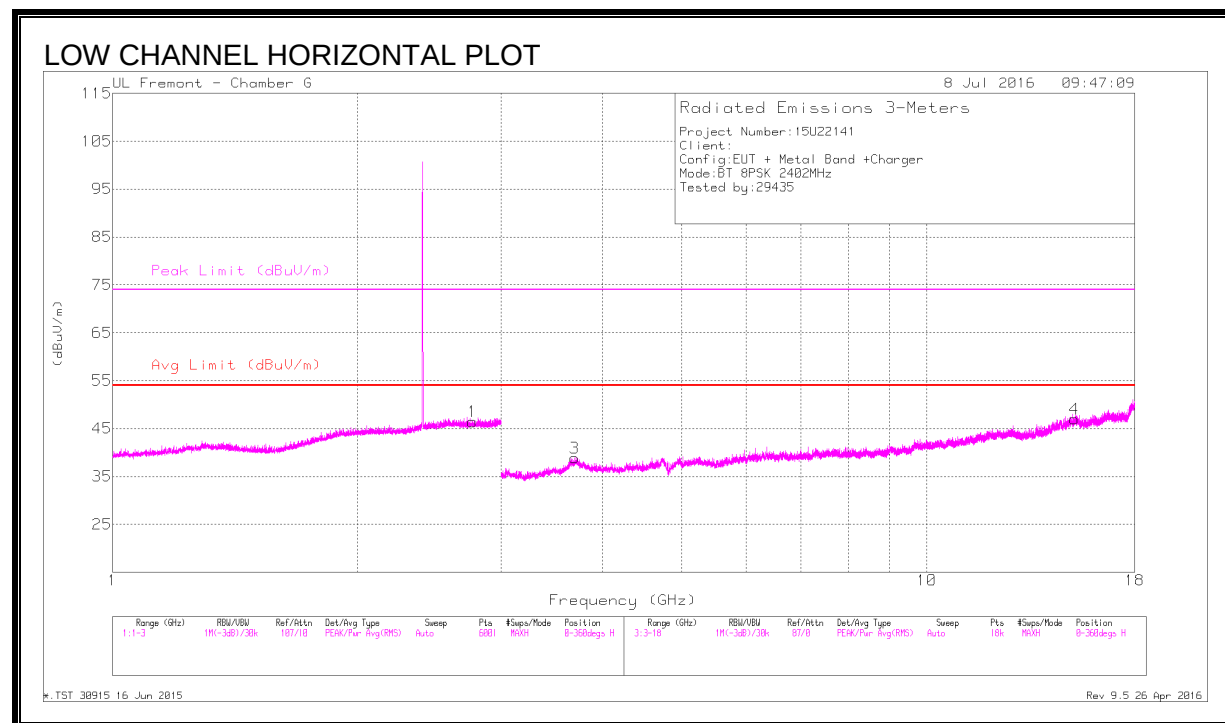
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	41.08	Pk	32.3	-21	52.38	-	-	74	-21.62	146	173	V
2	2.509	42.12	Pk	32.3	-21	53.42	-	-	74	-20.58	146	173	V
3	* 2.484	29.75	VA1T	32.3	-21	41.05	54	-12.95	-	-	146	173	V
4	* 2.484	29.75	VA1T	32.3	-21	41.05	54	-12.95	-	-	146	173	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

HARMONICS AND SPURIOUS EMISSIONS



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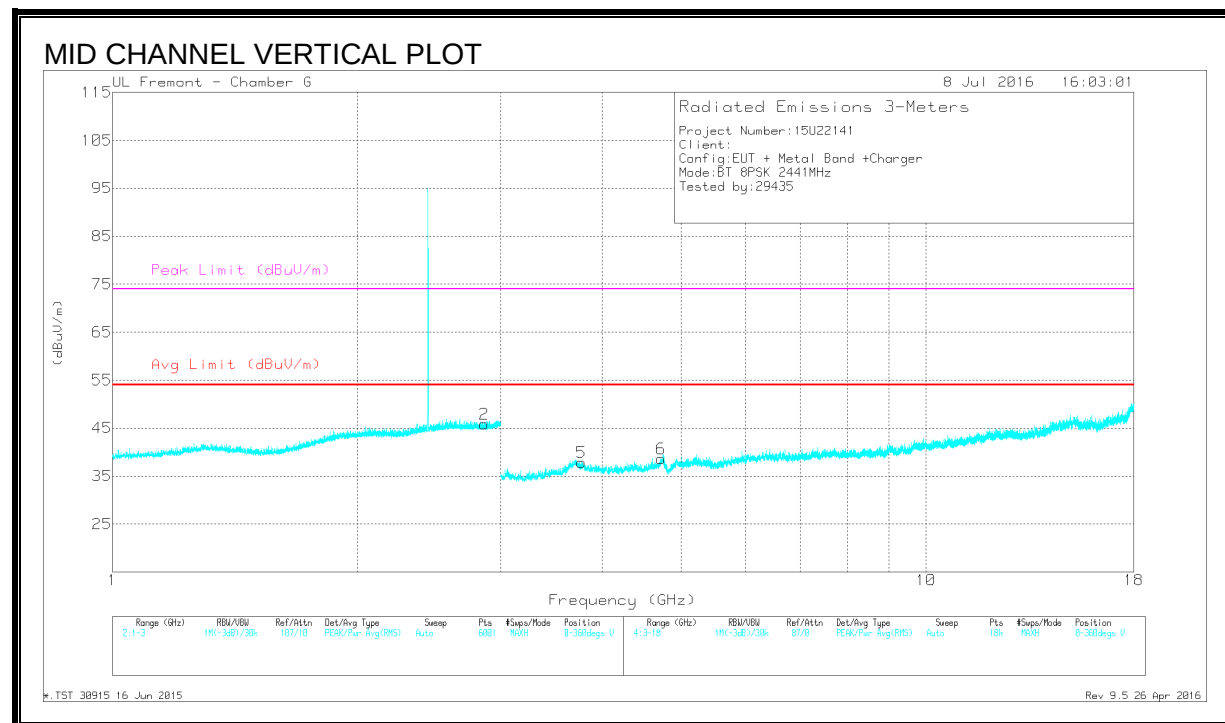
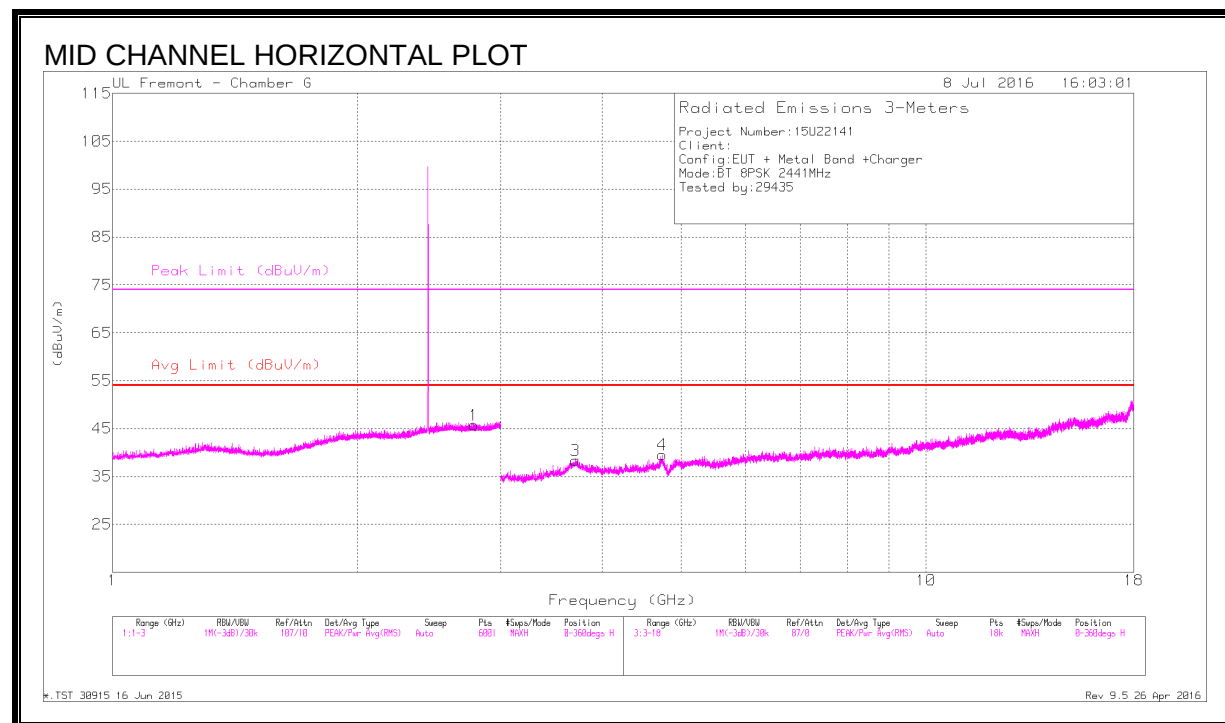
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Filtr/P ad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.764	42.35	PKFH	32.6	-23.6	51.35	-	-	74	-22.65	127	233	H
1	* 2.767	31.12	VA1T	32.6	-23.6	40.12	54	-13.88	-	-	127	233	H
2	* 2.682	42.75	PKFH	32.5	-23.6	51.65	-	-	74	-22.35	333	221	V
2	* 2.68	31.41	VA1T	32.5	-23.6	40.31	54	-13.69	-	-	333	221	V
3	* 3.691	40.93	PKFH	34.3	-30.8	44.43	-	-	74	-29.57	217	147	H
3	* 3.691	29.29	VA1T	34.3	-30.8	32.79	54	-21.21	-	-	217	147	H
5	* 4.72	42.45	PKFH	34.3	-31.7	45.05	-	-	74	-28.95	175	149	V
5	* 4.72	31.21	VA1T	34.3	-31.7	33.81	54	-20.19	-	-	175	149	V
6	9.686	26.59	VA1T	36.7	-26.9	36.39	-	-	-	-	216	219	V
6	9.69	37.67	PKFH	36.7	-26.9	47.47	-	-	-	-	216	219	V
4	15.182	27.16	VA1T	40.6	-25.5	42.26	-	-	-	-	312	158	H
4	15.184	39.17	PKFH	40.6	-25.5	54.27	-	-	-	-	312	158	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

HARMONICS AND SPURIOUS EMISSIONS



DATA

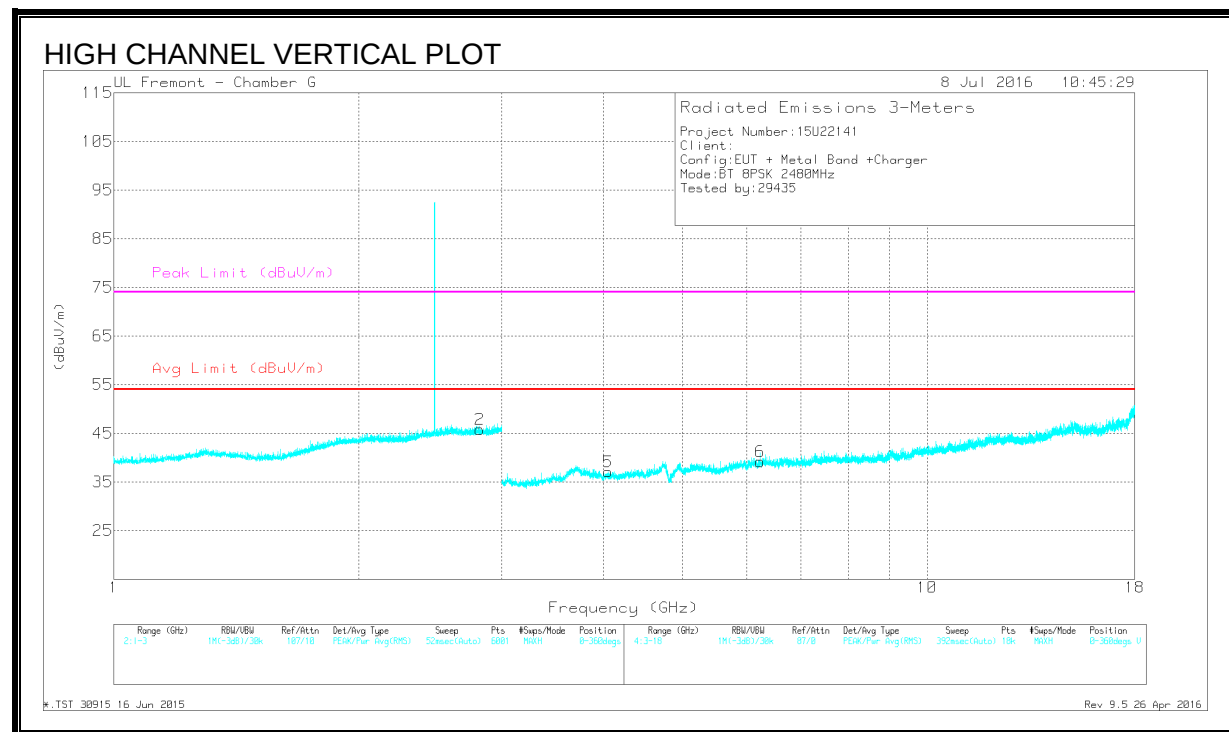
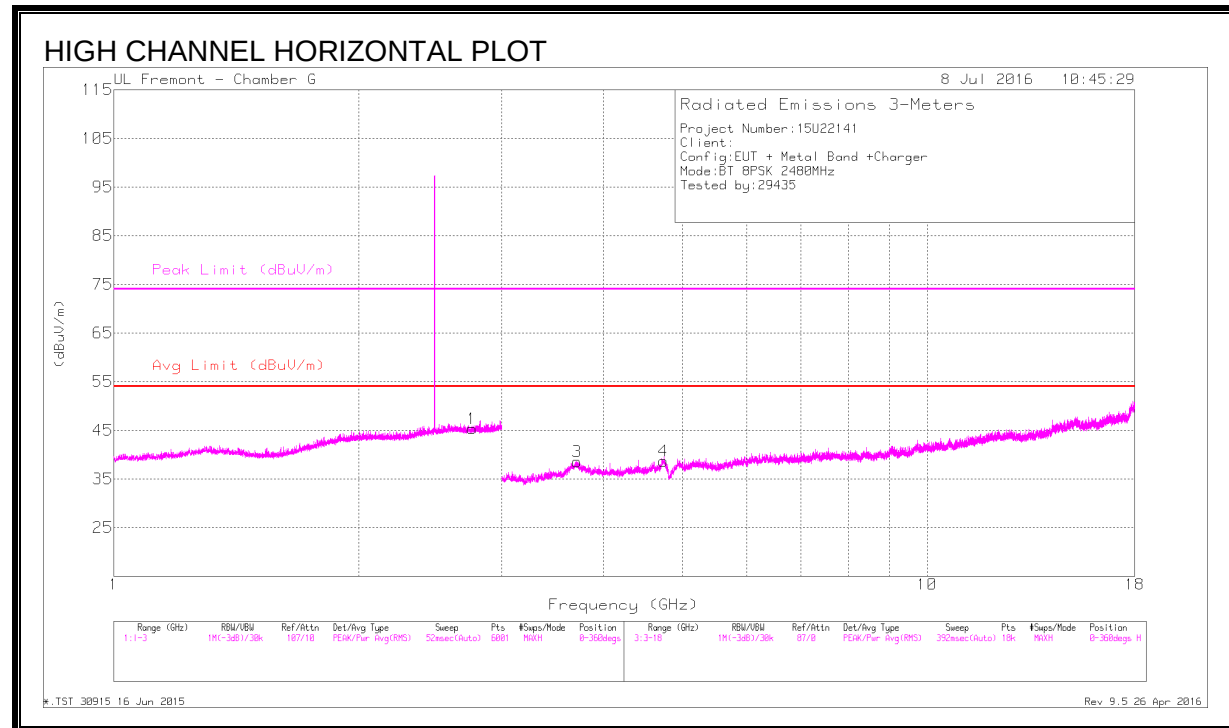
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1	* 2.778	43.11	PKFH	32.7	-23.6	52.21	-	-	74	-21.79	343	238	H
	* 2.779	31.11	VA1T	32.7	-23.6	40.21	54	-13.79	-	-	343	238	H
2	* 2.864	42.58	PKFH	32.6	-23.5	51.68	-	-	74	-22.32	255	245	V
	* 2.862	30.9	VA1T	32.6	-23.5	40	54	-14	-	-	255	245	V
3	* 3.708	40.78	PKFH	34.3	-30.7	44.38	-	-	74	-29.62	239	177	H
	* 3.709	29.32	VA1T	34.3	-30.7	32.92	54	-21.08	-	-	239	177	H
4	* 4.739	43.05	PKFH	34.4	-31.7	45.75	-	-	74	-28.25	346	137	H
	* 4.74	31.42	VA1T	34.4	-31.7	34.12	54	-19.88	-	-	346	137	H
5	* 3.77	40.12	PKFH	34	-31.3	42.82	-	-	74	-31.18	90	242	V
	* 3.771	29.56	VA1T	34	-31.4	32.16	54	-21.84	-	-	90	242	V
6	* 4.721	42.26	PKFH	34.3	-31.7	44.86	-	-	74	-29.14	225	332	V
	* 4.722	30.64	VA1T	34.3	-31.7	33.24	54	-20.76	-	-	225	332	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

HARMONICS AND SPURIOUS EMISSIONS



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Filtr/P ad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.76	42.66	PKFH	32.6	-23.5	51.76	-	-	74	-22.24	207	224	H
	* 2.76	31.04	VA1T	32.6	-23.5	40.14	54	-13.86	-	-	207	224	H
2	* 2.821	42.17	PKFH	32.7	-23.6	51.27	-	-	74	-22.73	13	217	V
	* 2.82	31.09	VA1T	32.7	-23.6	40.19	54	-13.81	-	-	13	217	V
3	* 3.714	40.79	PKFH	34.2	-30.7	44.29	-	-	74	-29.71	6	129	H
	* 3.713	29.3	VA1T	34.2	-30.7	32.8	54	-21.2	-	-	6	129	H
4	* 4.742	42.66	PKFH	34.4	-31.8	45.26	-	-	74	-28.74	175	157	H
	* 4.741	31.53	VA1T	34.4	-31.7	34.23	54	-19.77	-	-	175	157	H
5	* 4.051	40.51	PKFH	33.6	-31.4	42.71	-	-	74	-31.29	276	231	H
	* 4.05	29.31	VA1T	33.6	-31.4	31.51	54	-22.49	-	-	276	231	H
6	* 5.39	40.87	PKFH	34.7	-31	44.57	-	-	74	-29.43	251	134	H
	* 5.393	29.22	VA1T	34.7	-31	32.92	54	-21.08	-	-	251	134	H

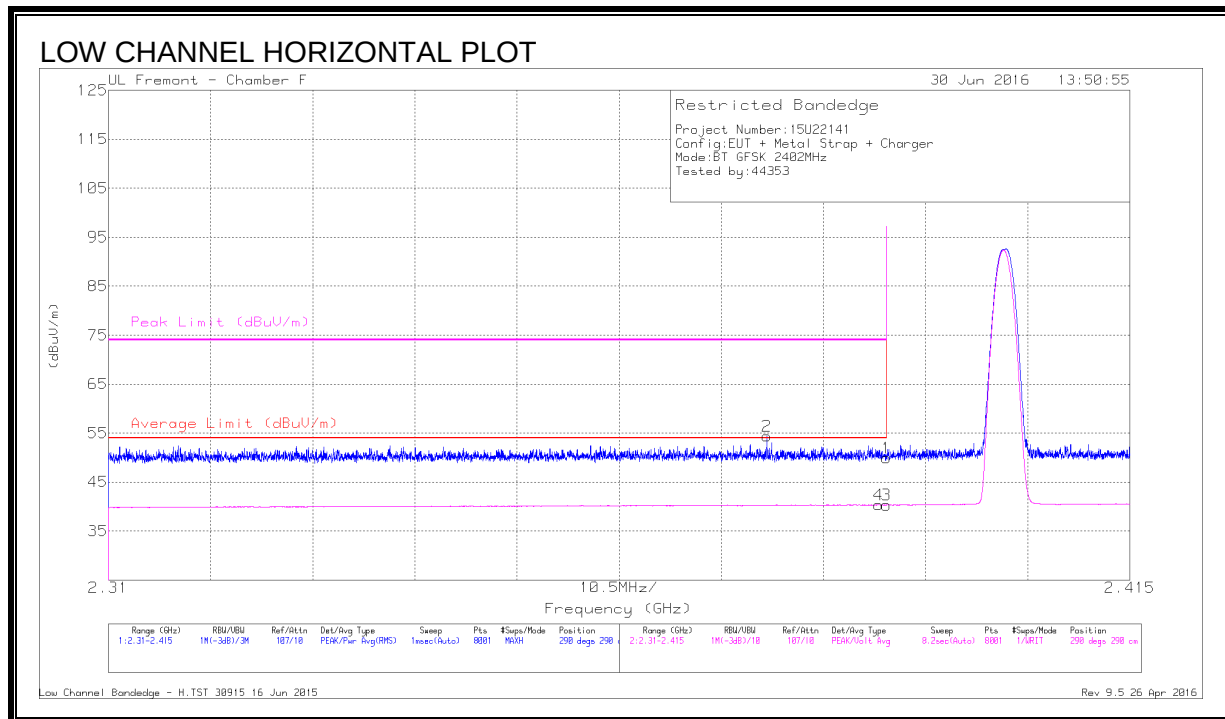
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

8.2.3. LOW POWER BASIC DATA RATE GFSK MODULATION

RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)



DATA

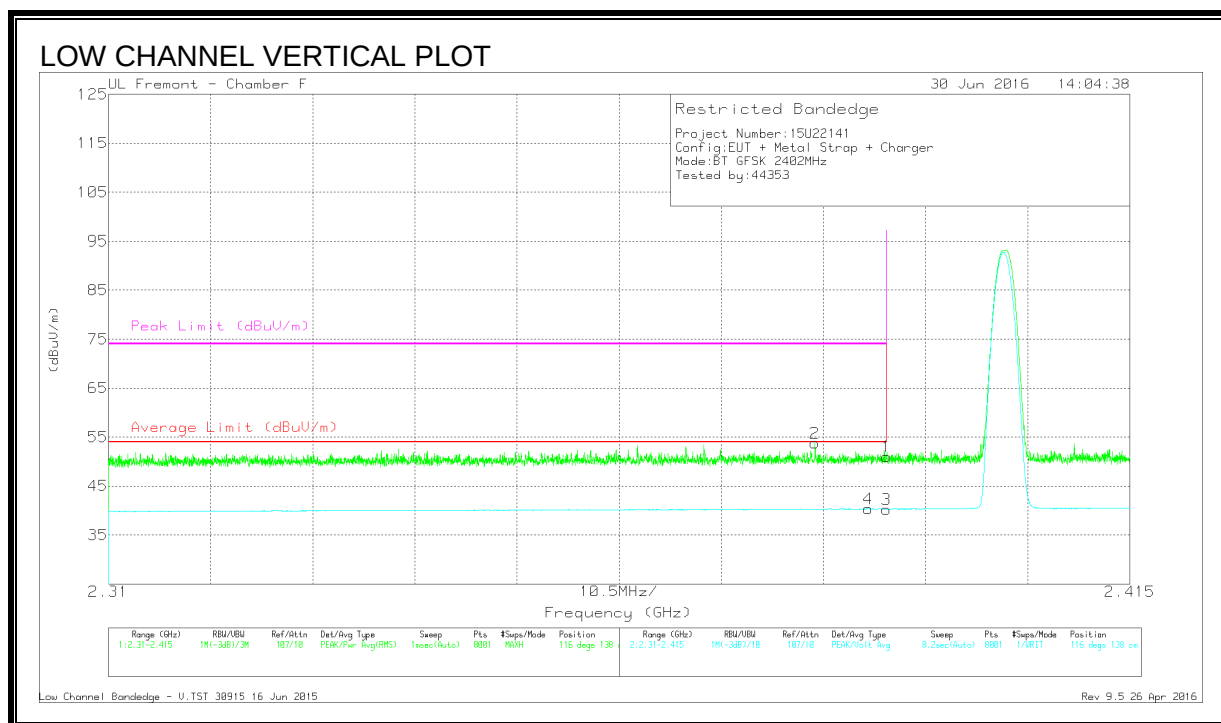
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AFT344 (dB/m)	Amp/Cbl/Fitr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	38.69	Pk	32.1	-20.9	49.89	-	-	74	-24.11	290	290	H
2	* 2.378	43.24	Pk	32.1	-20.9	54.44	-	-	74	-19.56	290	290	H
3	* 2.39	29.1	VA1T	32.1	-20.9	40.3	54	-13.7	-	-	290	290	H
4	* 2.389	29.13	VA1T	32.1	-20.9	40.33	54	-13.67	-	-	290	290	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)



DATA

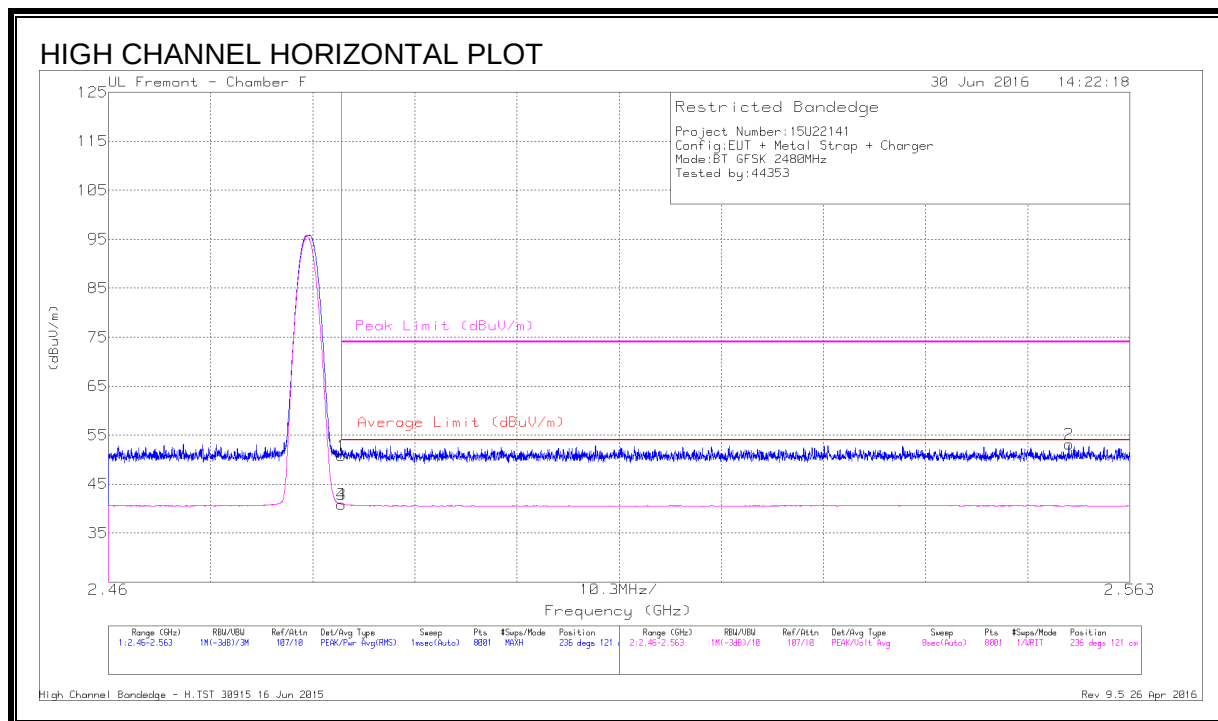
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Filt/Pa d (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	39.86	Pk	32.1	-20.9	51.06	-	-	74	-22.94	116	138	V
2	* 2.383	42.59	Pk	32.1	-20.9	53.79	-	-	74	-20.21	116	138	V
3	* 2.39	29.05	VA1T	32.1	-20.9	40.25	54	-13.75	-	-	116	138	V
4	* 2.388	29.14	VA1T	32.1	-20.9	40.34	54	-13.66	-	-	116	138	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)



DATA

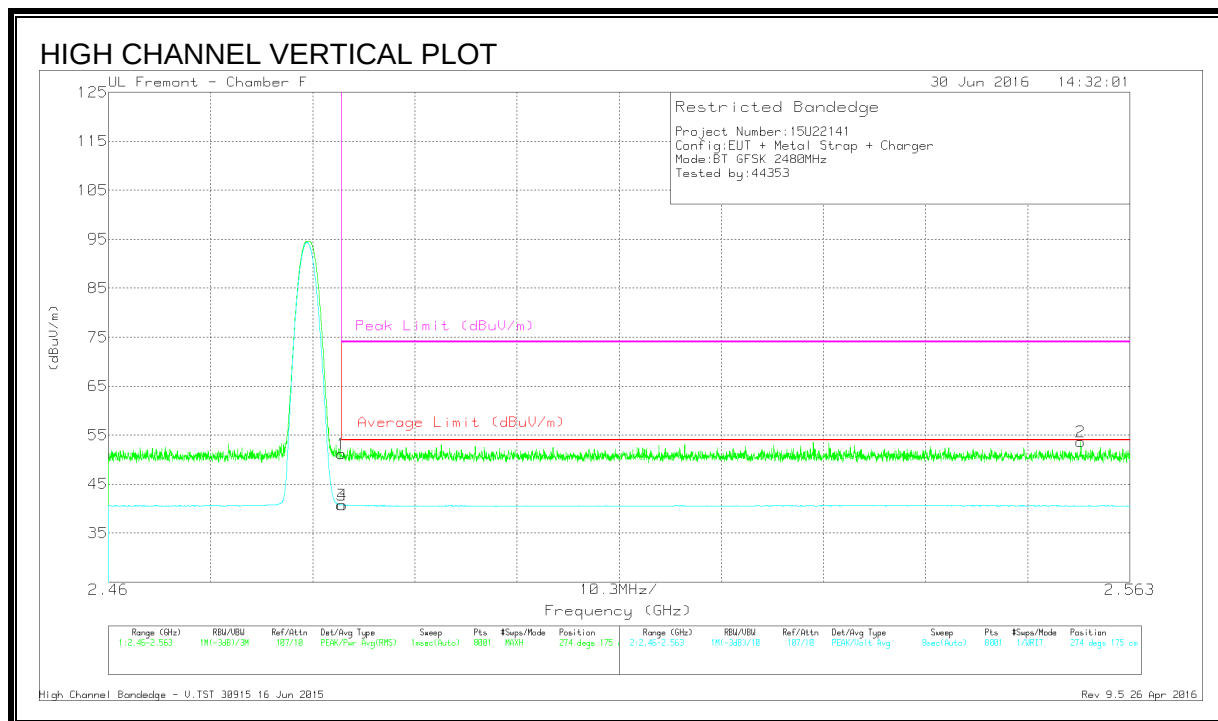
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Filt/Pa d (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	39.5	Pk	32.3	-21	50.8	-	-	74	-23.2	236	121	H
2	2.557	41.85	Pk	32.2	-20.9	53.15	-	-	74	-20.85	236	121	H
3	* 2.484	29.58	VA1T	32.3	-21	40.88	54	-13.12	-	-	236	121	H
4	* 2.484	29.59	VA1T	32.3	-21	40.89	54	-13.11	-	-	236	121	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)



DATA

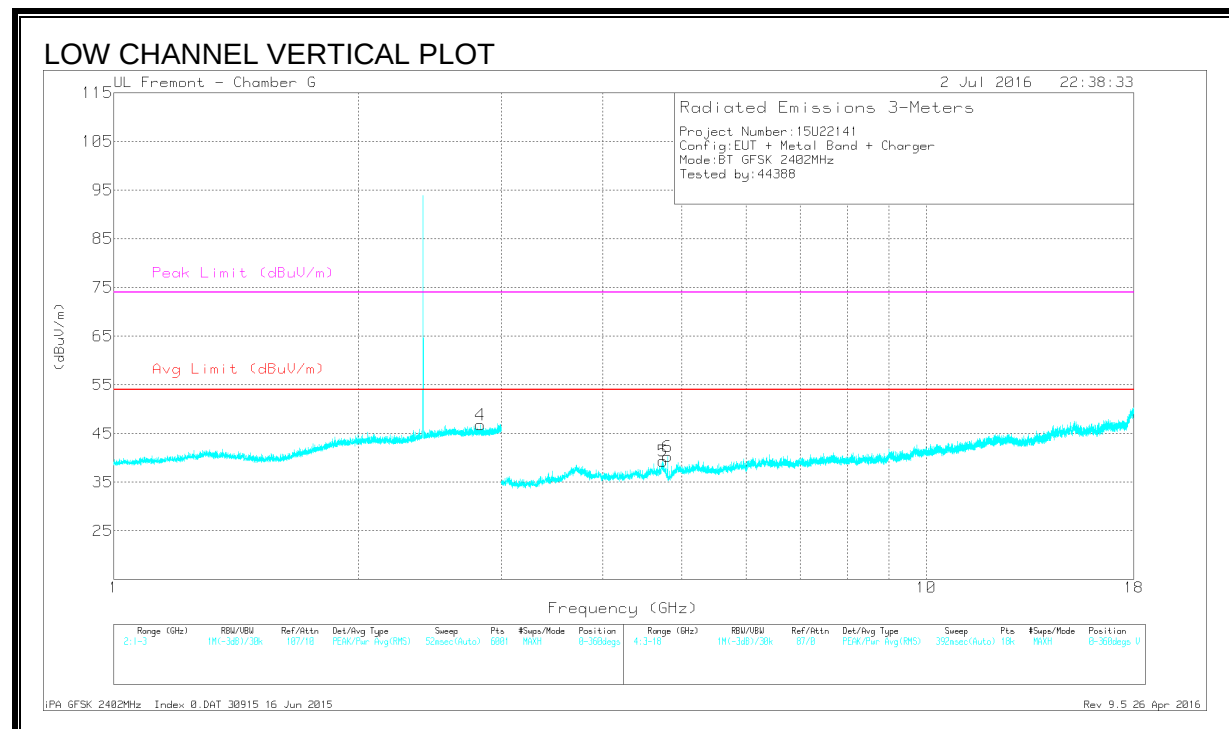
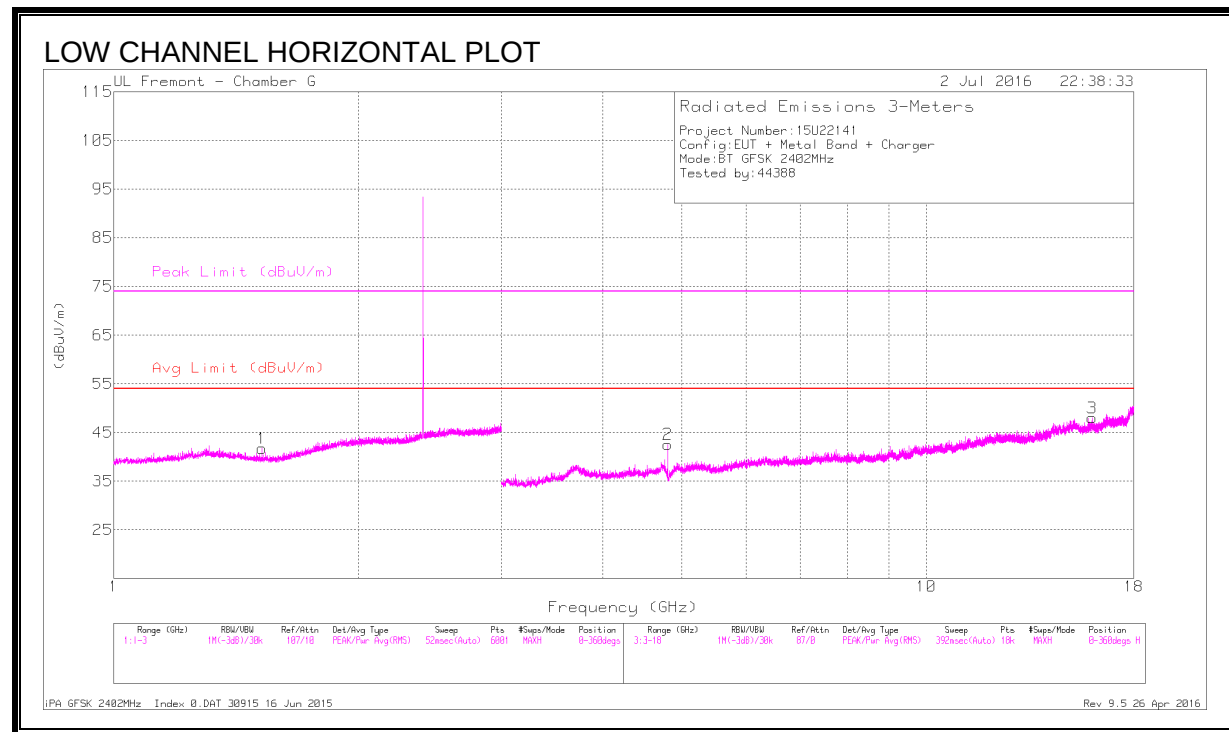
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Filtr/Pa d (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	39.83	Pk	32.3	-21	51.13	-	-	74	-22.87	274	175	V
2	2.558	42.34	Pk	32.2	-20.9	53.64	-	-	74	-20.36	274	175	V
3	* 2.484	29.44	VA1T	32.3	-21	40.74	54	-13.26	-	-	274	175	V
4	* 2.484	29.46	VA1T	32.3	-21	40.76	54	-13.24	-	-	274	175	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

HARMONICS AND SPURIOUS EMISSIONS



DATA

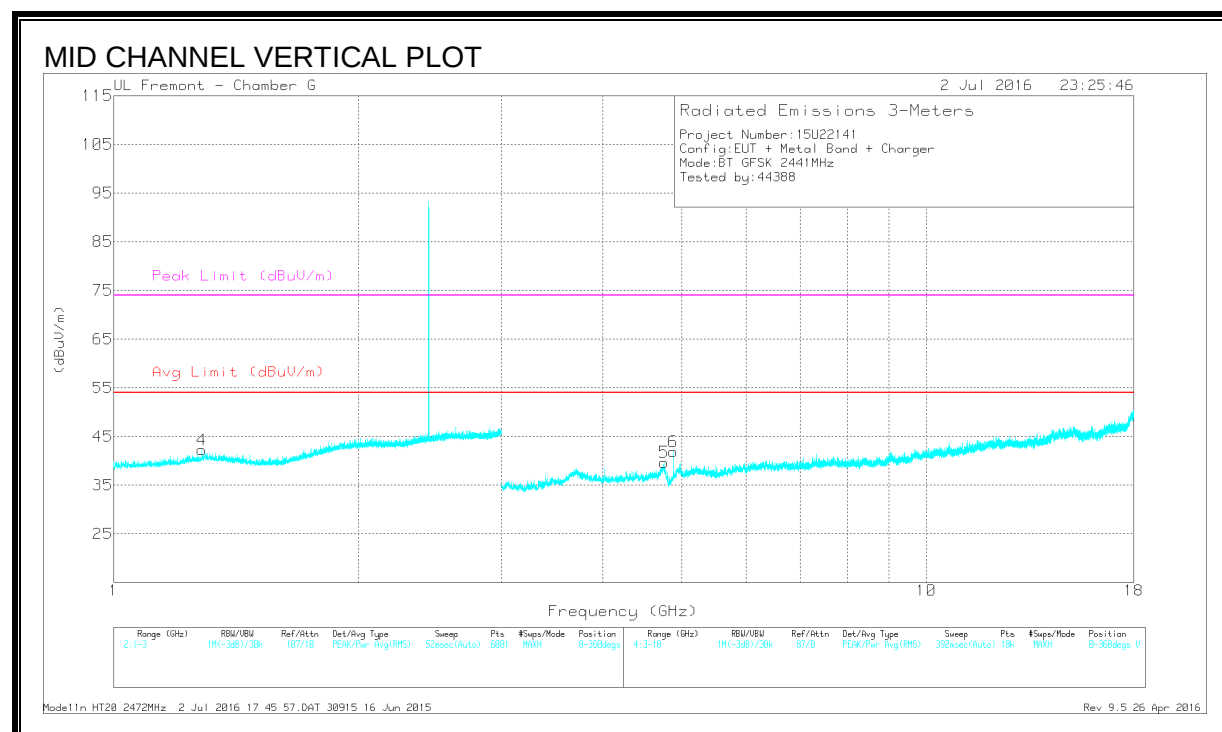
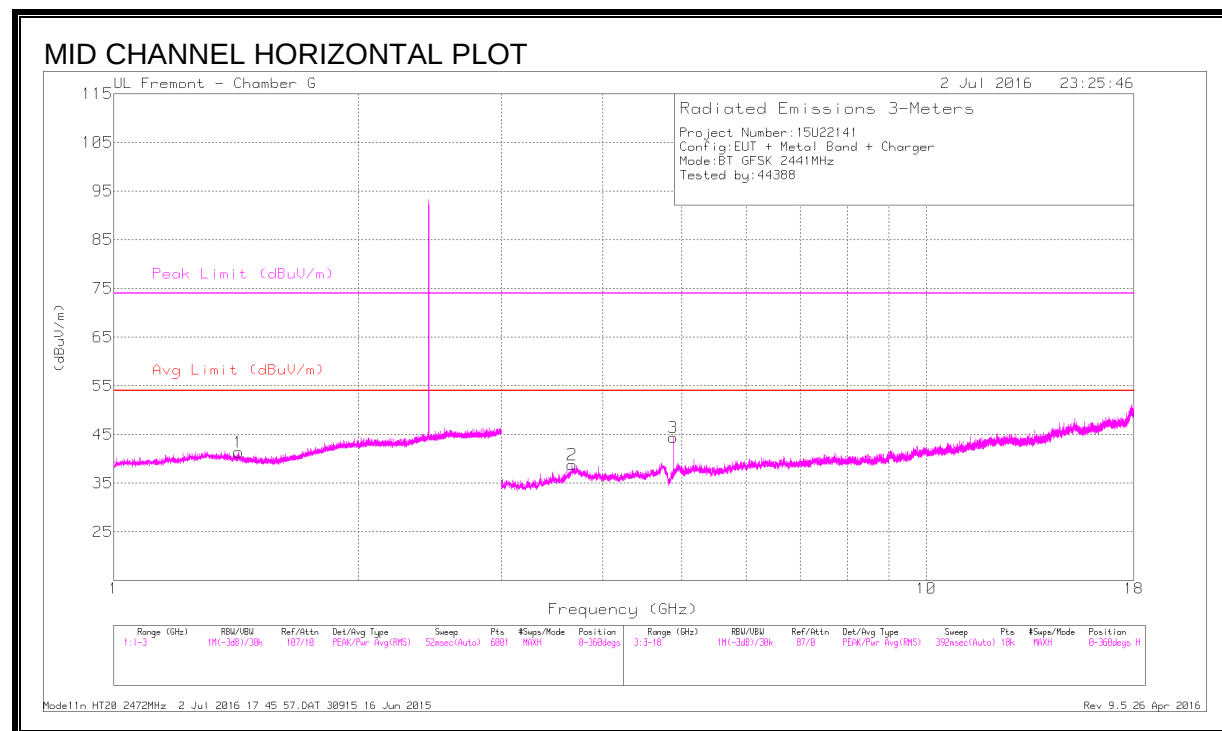
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.524	43.72	PKFH	28.1	-24.5	47.32	-	-	74	-26.68	73	116	H
	* 1.522	30.86	VA1T	28.1	-24.5	34.46	54	-19.54	-	-	73	116	H
4	* 2.827	42.44	PKFH	32.7	-23.6	51.54	-	-	74	-22.46	79	131	V
	* 2.827	30.82	VA1T	32.7	-23.6	39.92	54	-14.08	-	-	79	131	V
2	* 4.804	45.75	PKFH	34.4	-31.9	48.25	-	-	74	-25.75	77	102	H
	* 4.804	40.57	VA1T	34.4	-31.9	43.07	54	-10.93	-	-	77	102	H
3	* 15.995	38.56	PKFH	41	-25.6	53.96	-	-	74	-20.04	87	123	H
	* 15.995	26.46	VA1T	41	-25.6	41.86	54	-12.14	-	-	87	123	H
5	* 4.742	42.61	PKFH	34.4	-31.8	45.21	-	-	74	-28.79	44	114	V
	* 4.742	31.1	VA1T	34.4	-31.8	33.7	54	-20.3	-	-	44	114	V
6	* 4.804	44.26	PKFH	34.4	-31.9	46.76	-	-	74	-27.24	82	206	V
	* 4.804	37.18	VA1T	34.4	-31.9	39.68	54	-14.32	-	-	82	206	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

HARMONICS AND SPURIOUS EMISSIONS



DATA

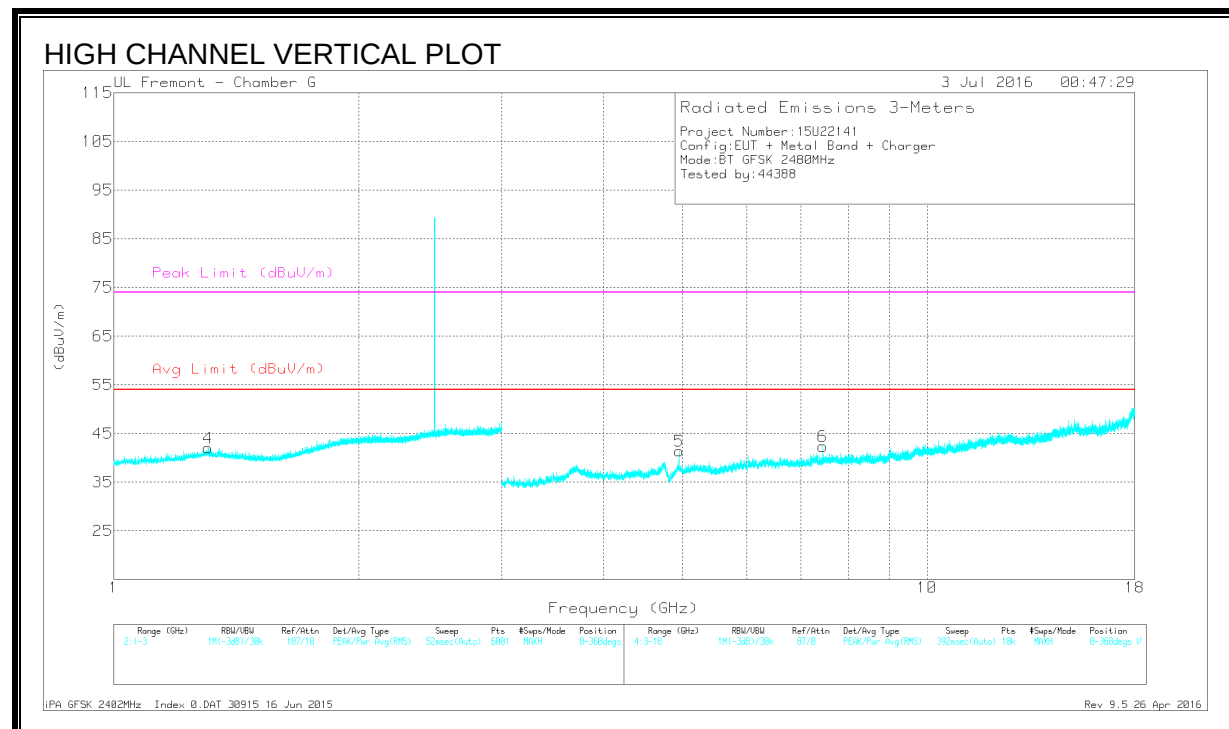
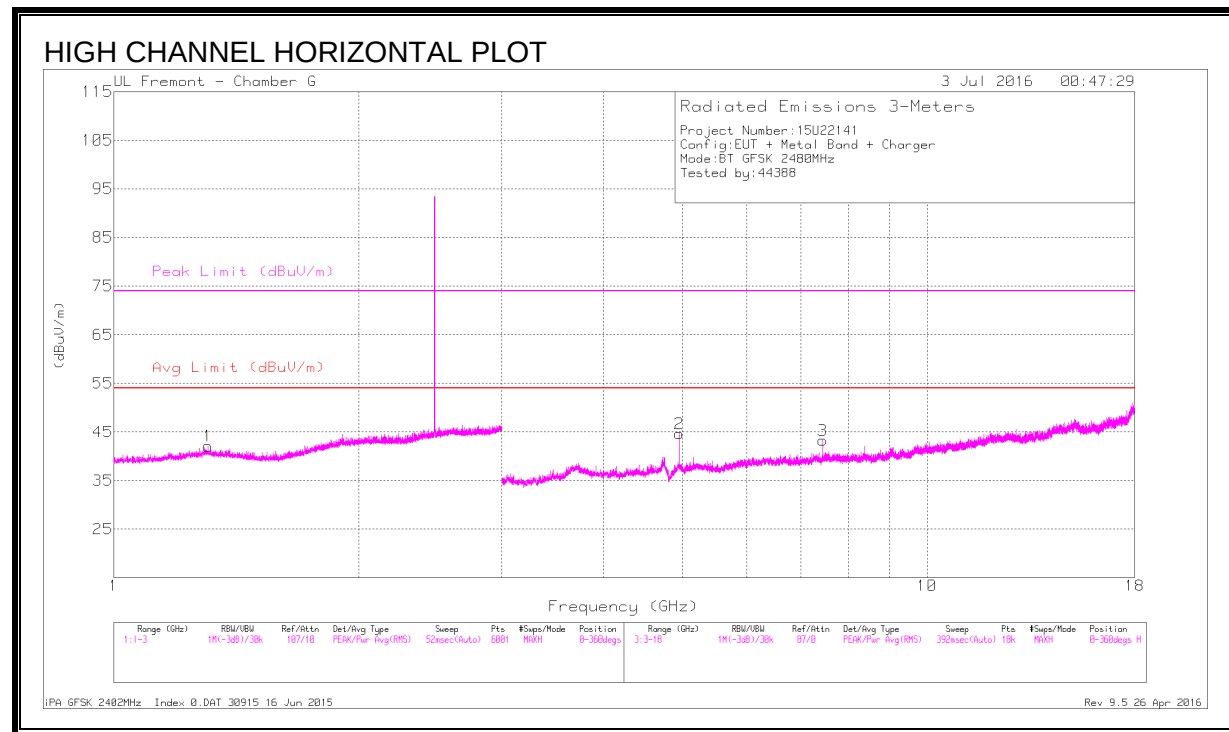
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.426	42.55	PKFH	28.6	-24.7	46.45	-	-	74	-27.55	40	156	H
	* 1.425	31.37	VA1T	28.6	-24.7	35.27	54	-18.73	-	-	40	156	H
4	* 1.286	42.72	PKFH	29.1	-25	46.82	-	-	74	-27.18	36	252	V
	* 1.284	31.71	VA1T	29.1	-25.1	35.71	54	-18.29	-	-	36	252	V
2	* 3.664	42.4	PKFH	34.2	-31.1	45.5	-	-	74	-28.5	51	146	H
	* 3.663	29.45	VA1T	34.2	-31.1	32.55	54	-21.45	-	-	51	146	H
3	* 4.882	46.4	PKFH	34.5	-31.8	49.1	-	-	74	-24.9	46	125	H
	* 4.882	41.08	VA1T	34.5	-31.8	43.78	54	-10.22	-	-	46	125	H
5	* 4.76	42.75	PKFH	34.4	-31.8	45.35	-	-	74	-28.65	29	226	V
	* 4.759	31.85	VA1T	34.4	-31.8	34.45	54	-19.55	-	-	29	226	V
6	* 4.882	45.49	PKFH	34.5	-31.8	48.19	-	-	74	-25.81	36	280	V
	* 4.882	38.6	VA1T	34.5	-31.8	41.3	54	-12.7	-	-	36	280	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

HARMONICS AND SPURIOUS EMISSIONS



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Filtr/P ad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 1.308	43.31	PKFH	29.2	-25	47.51	-	-	74	-26.49	58	175	H
	* 1.307	31.82	VA1T	29.2	-25	36.02	54	-17.98	-	-	58	175	H
4	* 1.307	43.45	PKFH	29.2	-25	47.65	-	-	74	-26.35	44	251	V
	* 1.305	31.6	VA1T	29.2	-25	35.8	54	-18.2	-	-	44	251	V
2	* 4.96	46.19	PKFH	34.6	-31.8	48.99	-	-	74	-25.01	51	117	H
	* 4.96	40.19	VA1T	34.6	-31.8	42.99	54	-11.01	-	-	51	117	H
3	* 7.441	42.64	PKFH	35.9	-30.2	48.34	-	-	74	-25.66	352	219	H
	* 7.44	32.61	VA1T	35.9	-30.2	38.31	54	-15.69	-	-	352	219	H
5	* 4.96	45	PKFH	34.6	-31.8	47.8	-	-	74	-26.2	34	360	V
	* 4.96	37.7	VA1T	34.6	-31.8	40.5	54	-13.5	-	-	34	360	V
6	* 7.441	42.51	PKFH	35.9	-30.2	48.21	-	-	74	-25.79	73	213	V
	* 7.44	33.93	VA1T	35.9	-30.2	39.63	54	-14.37	-	-	73	213	V

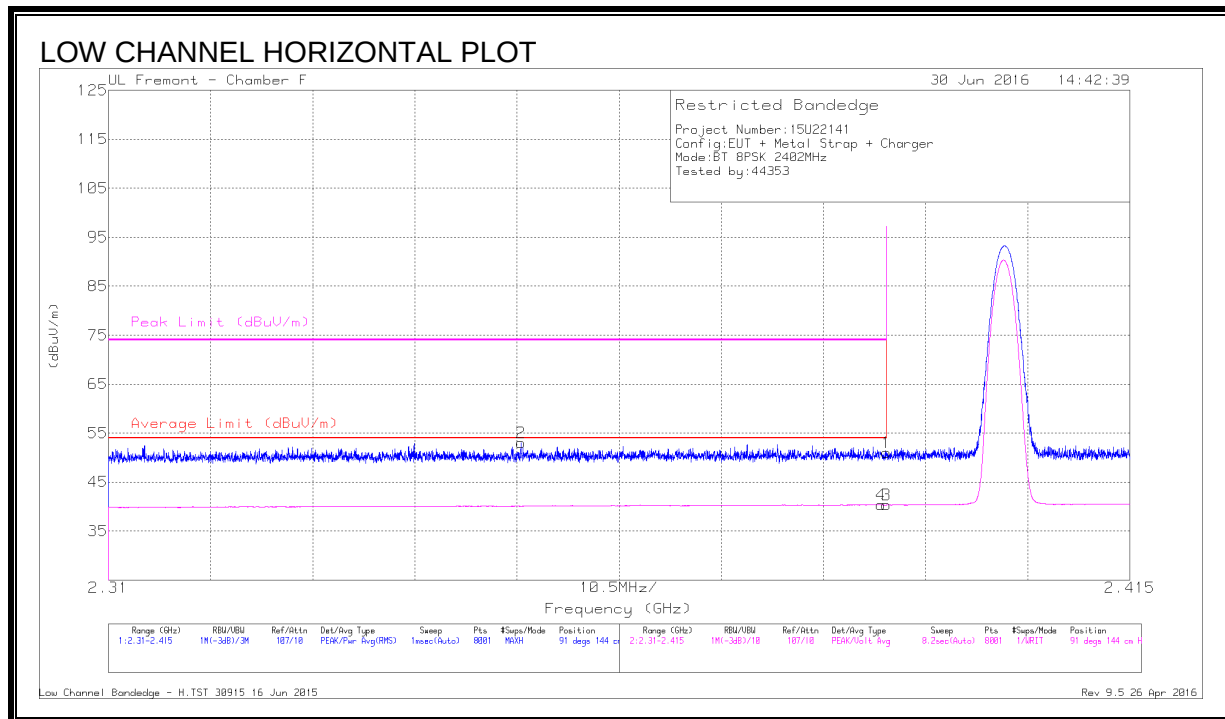
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

8.2.4. LOW POWER ENHANCED DATA RATE 8PSK MODULATION

RESTRICTED BANDEDGE (LOW CHANNEL, HORIZONTAL)



DATA

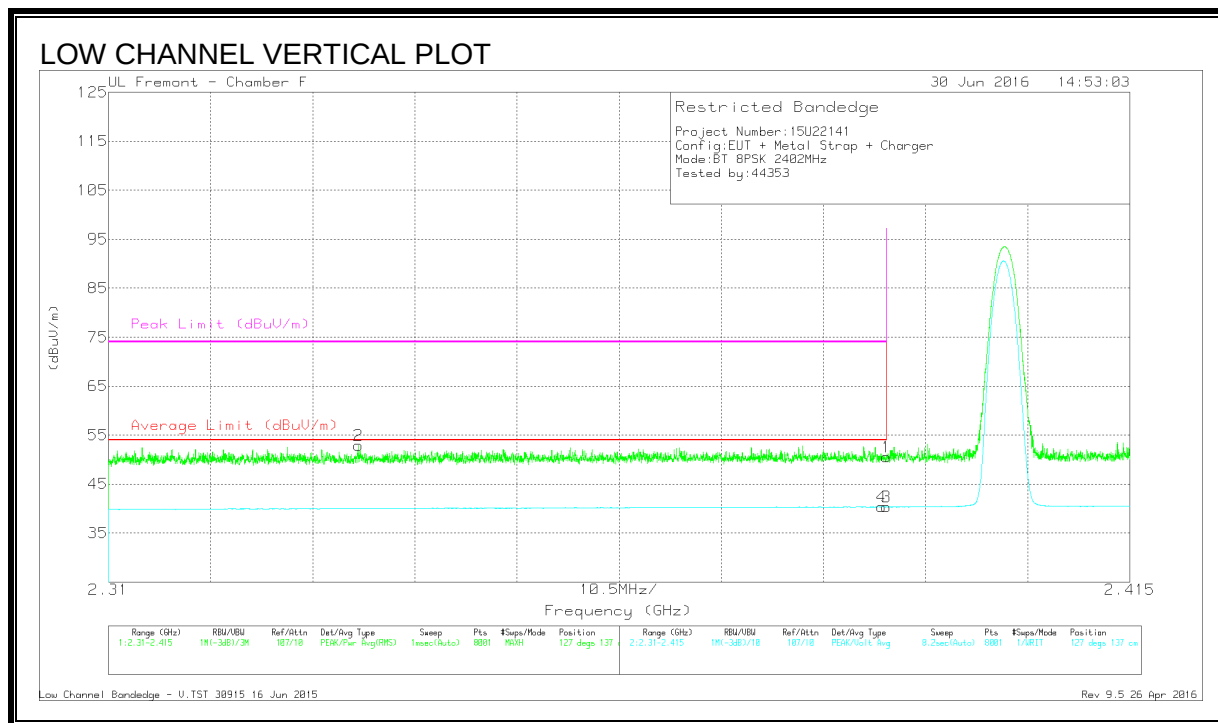
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1	* 2.39	39.83	Pk	32.1	-20.9	51.03	-	-	74	-22.97	91	144	H
2	* 2.352	42	Pk	31.9	-20.9	53	-	-	74	-21	91	144	H
3	* 2.39	29.11	VA1T	32.1	-20.9	40.31	54	-13.69	-	-	91	144	H
4	* 2.389	29.15	VA1T	32.1	-20.9	40.35	54	-13.65	-	-	91	144	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

RESTRICTED BANDEDGE (LOW CHANNEL, VERTICAL)



DATA

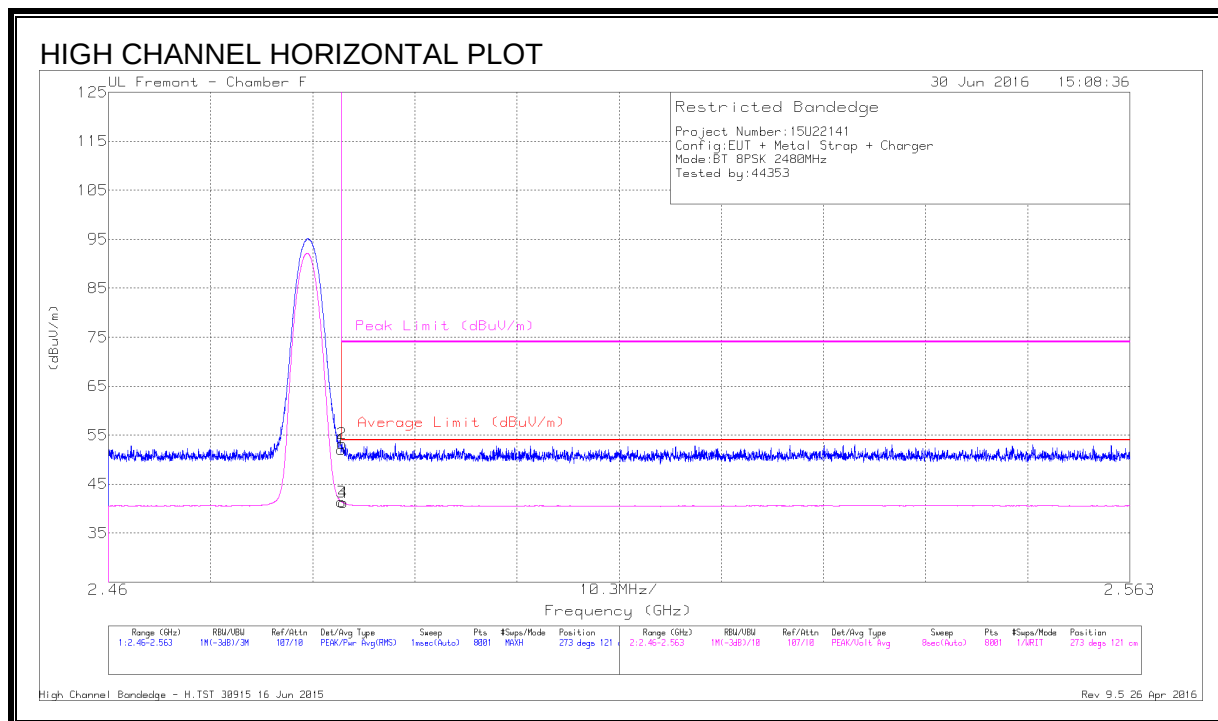
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Filt/Pa d (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.39	39.29	Pk	32.1	-20.9	50.49	-	-	74	-23.51	127	137	V
2	* 2.336	41.86	Pk	31.9	-20.9	52.86	-	-	74	-21.14	127	137	V
3	* 2.39	29.11	VA1T	32.1	-20.9	40.31	54	-13.69	-	-	127	137	V
4	* 2.389	29.15	VA1T	32.1	-20.9	40.35	54	-13.65	-	-	127	137	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

RESTRICTED BANDEDGE (HIGH CHANNEL, HORIZONTAL)



DATA

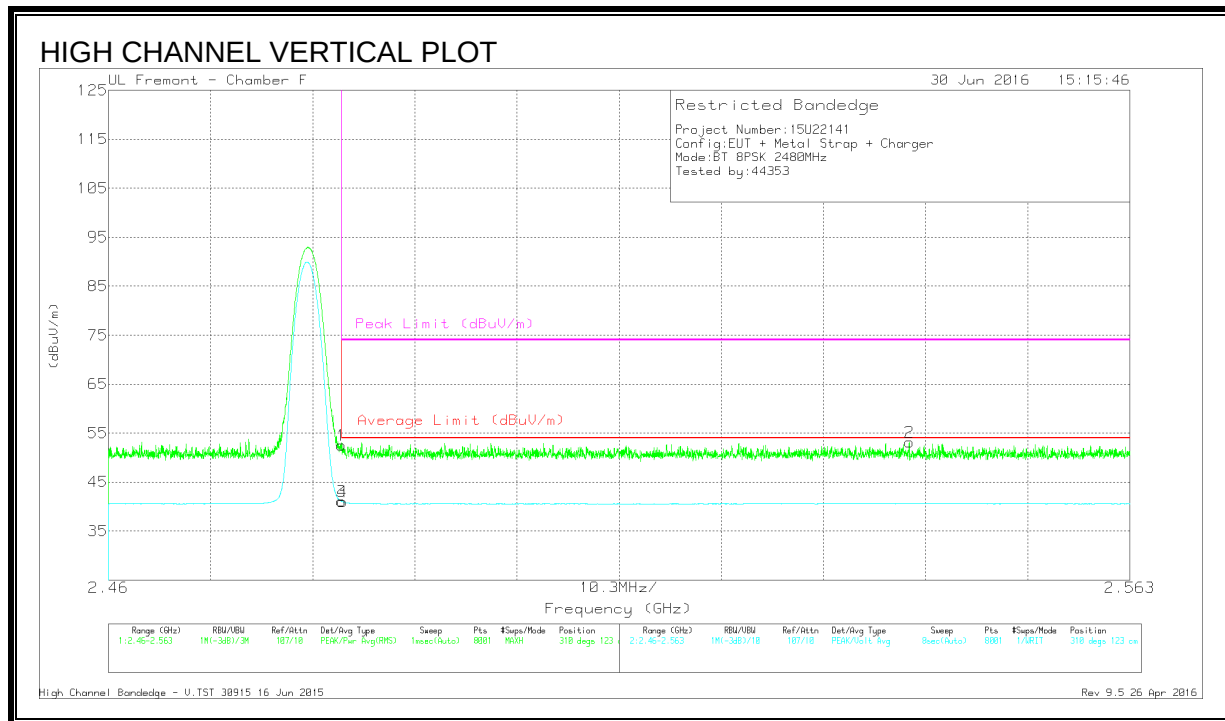
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Filt/Pa d (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	40.7	Pk	32.3	-21	52	-	-	74	-22	273	121	H
2	* 2.484	41.98	Pk	32.3	-21	53.28	-	-	74	-20.72	273	121	H
3	* 2.484	30.07	VA1T	32.3	-21	41.37	54	-12.63	-	-	273	121	H
4	* 2.484	29.9	VA1T	32.3	-21	41.2	54	-12.8	-	-	273	121	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

RESTRICTED BANDEDGE (HIGH CHANNEL, VERTICAL)



DATA

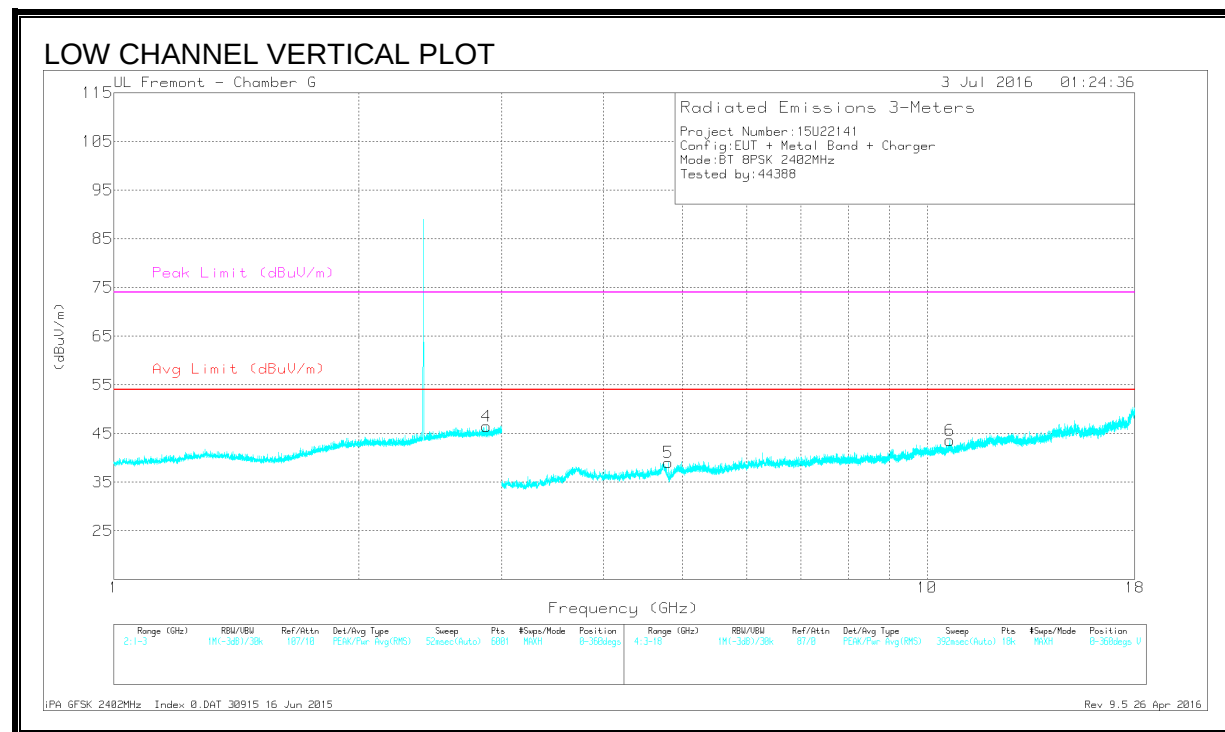
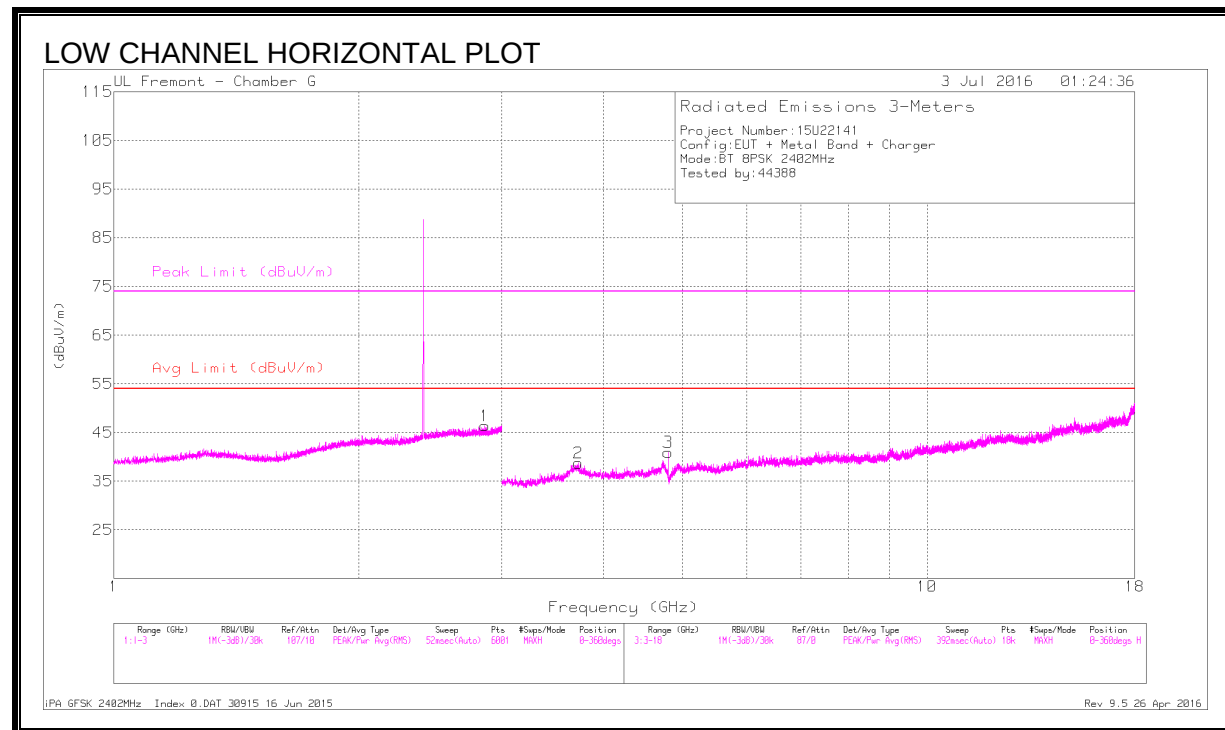
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T344 (dB/m)	Amp/Cbl/Filtr/Pad (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	41.2	Pk	32.3	-21	52.5	-	-	74	-21.5	310	123	V
2	2.541	41.9	Pk	32.2	-20.9	53.2	-	-	74	-20.8	310	123	V
3	* 2.484	29.76	VA1T	32.3	-21	41.06	54	-12.94	-	-	310	123	V
4	* 2.484	29.7	VA1T	32.3	-21	41	54	-13	-	-	310	123	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

HARMONICS AND SPURIOUS EMISSIONS



DATA

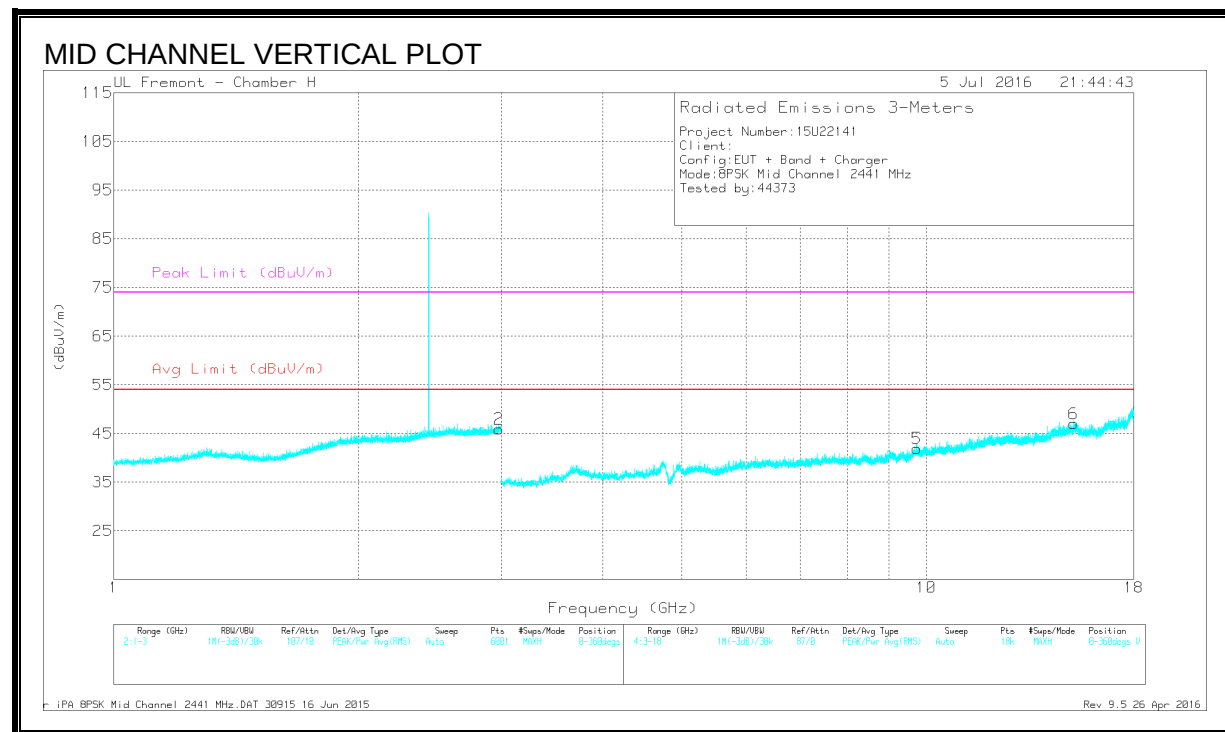
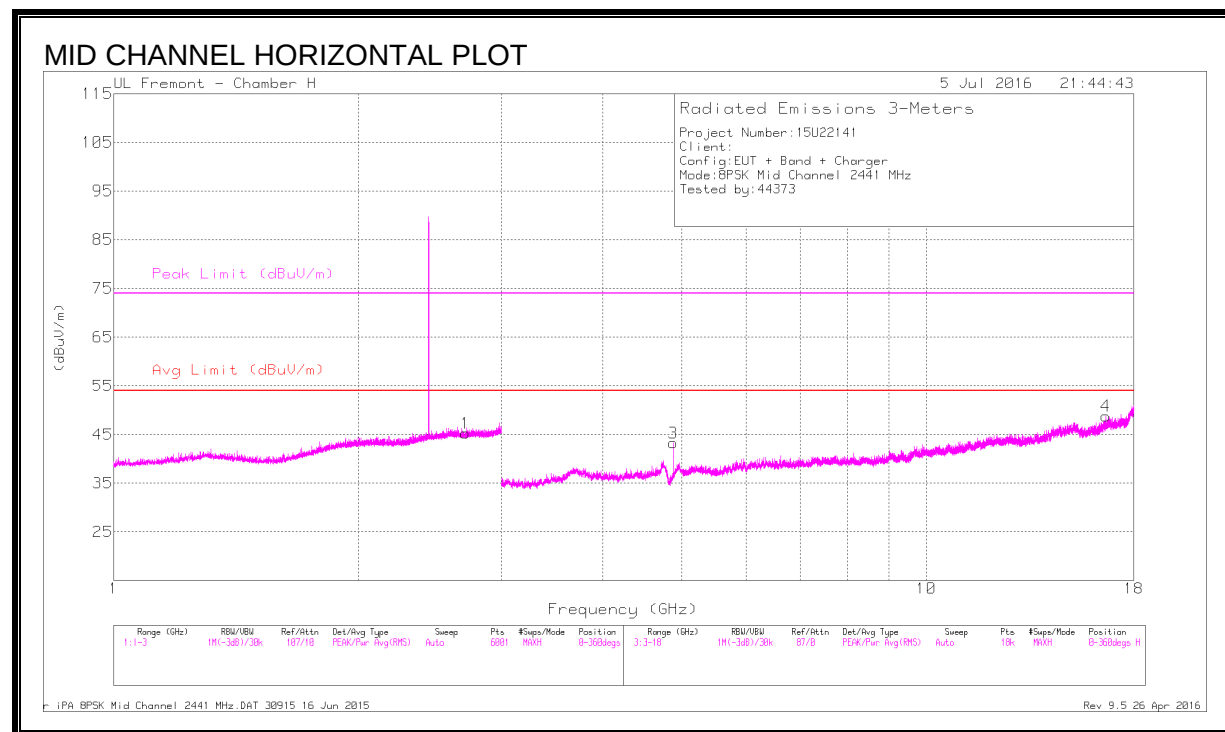
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Filtr/P ad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.859	42.34	PKFH	32.6	-23.5	51.44	-	-	74	-22.56	79	121	H
	* 2.859	30.5	VA1T	32.6	-23.5	39.6	54	-14.4	-	-	79	121	H
4	* 2.875	42.5	PKFH	32.6	-23.5	51.6	-	-	74	-22.4	111	206	V
	* 2.875	30.82	VA1T	32.6	-23.5	39.92	54	-14.08	-	-	111	206	V
3	* 4.804	44.57	PKFH	34.4	-31.9	47.07	-	-	74	-26.93	84	115	H
	* 4.804	35.35	VA1T	34.4	-31.9	37.85	54	-16.15	-	-	84	115	H
2	* 3.724	40.39	PKFH	34.2	-30.7	43.89	-	-	74	-30.11	92	156	H
	* 3.723	29.14	VA1T	34.2	-30.7	32.64	54	-21.36	-	-	92	156	H
5	* 4.804	43.03	PKFH	34.4	-31.9	45.53	-	-	74	-28.47	101	217	V
	* 4.804	33.89	VA1T	34.4	-31.9	36.39	54	-17.61	-	-	101	217	V
6	* 10.668	37.61	PKFH	37.5	-26.1	49.01	-	-	74	-24.99	99	226	V
	* 10.666	25.96	VA1T	37.5	-26.1	37.36	54	-16.64	-	-	99	226	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

HARMONICS AND SPURIOUS EMISSIONS



DATA

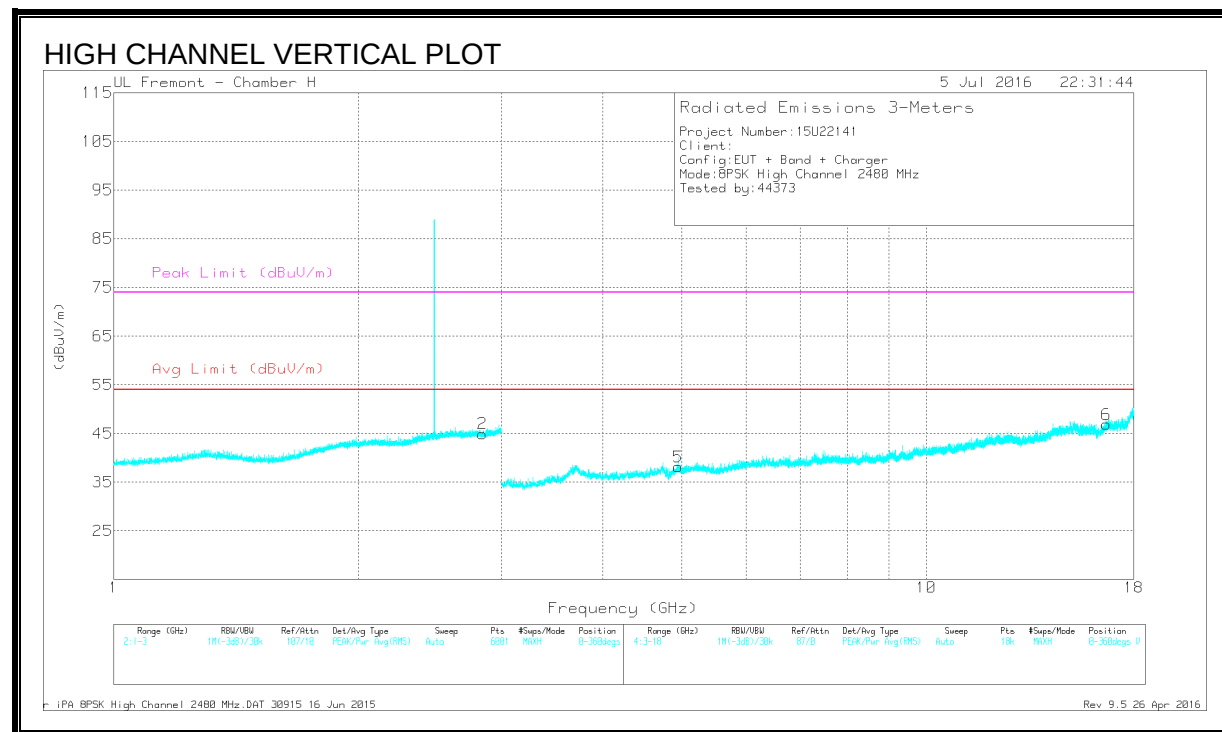
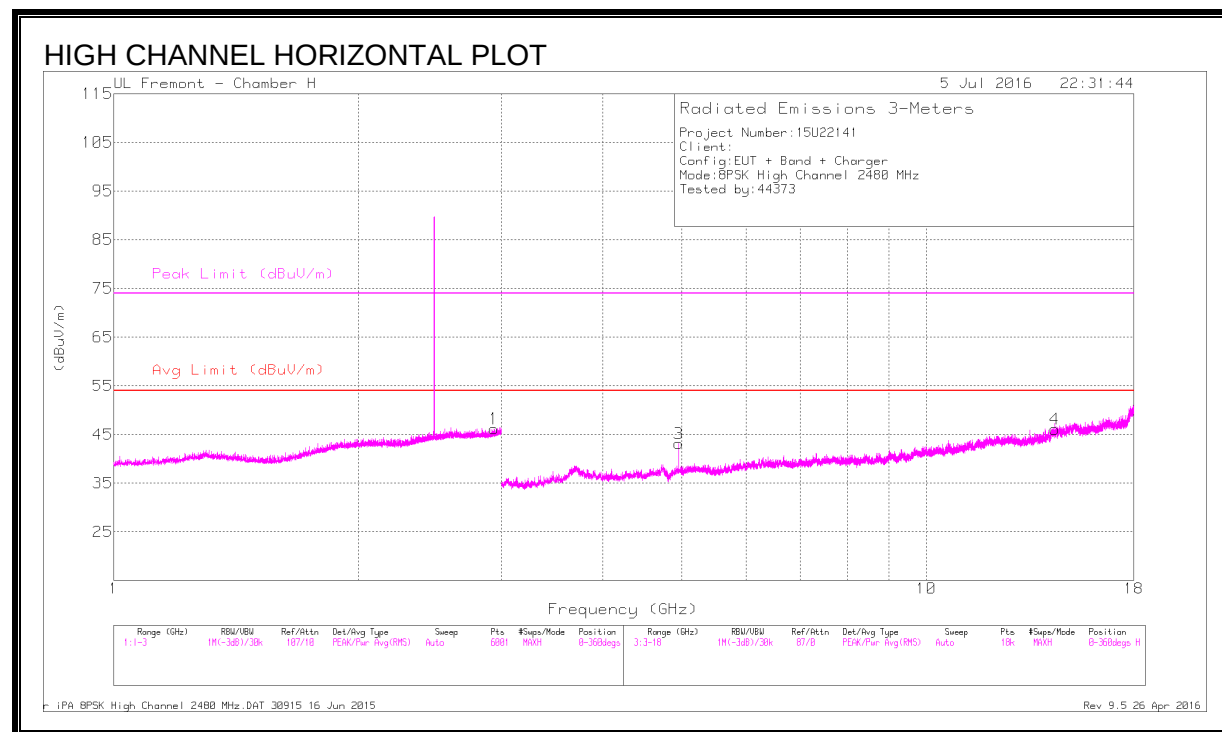
Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Filtr/P ad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.712	42.71	PKFH	32.5	-23.6	51.61	-	-	74	-22.39	89	178	H
1	* 2.712	31.25	VA1T	32.5	-23.6	40.15	54	-13.85	-	-	89	178	H
3	* 4.883	45.92	PKFH	34.5	-31.8	48.62	-	-	74	-25.38	157	109	H
3	* 4.882	38.5	VA1T	34.5	-31.8	41.2	54	-12.8	-	-	157	109	H
2	2.978	41.36	PKFH	32.8	-23.2	50.96	-	-	-	-	268	120	V
2	2.981	30.64	VA1T	32.8	-23.2	40.24	-	-	-	-	268	120	V
5	9.741	38.94	PKFH	36.8	-27	48.74	-	-	-	-	46	184	V
5	9.742	26.86	VA1T	36.8	-27.1	36.56	-	-	-	-	46	184	V
6	15.178	37.78	PKFH	40.6	-25.5	52.88	-	-	-	-	40	219	V
6	15.179	26.59	VA1T	40.6	-25.5	41.69	-	-	-	-	40	219	V
4	16.621	25.99	VA1T	41.8	-25.2	42.59	-	-	-	-	246	169	H
4	16.622	37.29	PKFH	41.8	-25.1	53.99	-	-	-	-	246	169	H

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

HARMONICS AND SPURIOUS EMISSIONS



DATA

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T136 (dB/m)	Amp/Cbl/Filtr/P ad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
2	* 2.841	42.01	PKFH	32.6	-23.6	51.01	-	-	74	-22.99	323	162	V
2	* 2.844	30.7	VA1T	32.6	-23.6	39.7	54	-14.3	-	-	323	162	V
3	* 4.959	46.24	PKFH	34.6	-31.8	49.04	-	-	74	-24.96	109	180	H
3	* 4.96	38.84	VA1T	34.6	-31.8	41.64	54	-12.36	-	-	109	180	H
5	* 4.953	41.79	PKFH	34.6	-31.8	44.59	-	-	74	-29.41	248	207	V
5	* 4.954	30.47	VA1T	34.6	-31.8	33.27	54	-20.73	-	-	248	207	V
1	2.936	30.58	VA1T	32.6	-23.3	39.88	-	-	-	-	82	113	H
1	2.939	42.35	PKFH	32.7	-23.3	51.75	-	-	-	-	82	113	H
4	14.387	38.24	PKFH	39.7	-25.4	52.54	-	-	-	-	86	258	H
4	14.39	26.71	VA1T	39.7	-25.4	41.01	-	-	-	-	86	258	H
6	16.649	24.32	VA1T	41.9	-24.9	41.32	-	-	-	-	245	139	V
6	16.651	35.32	PKFH	41.9	-24.9	52.32	-	-	-	-	245	139	V

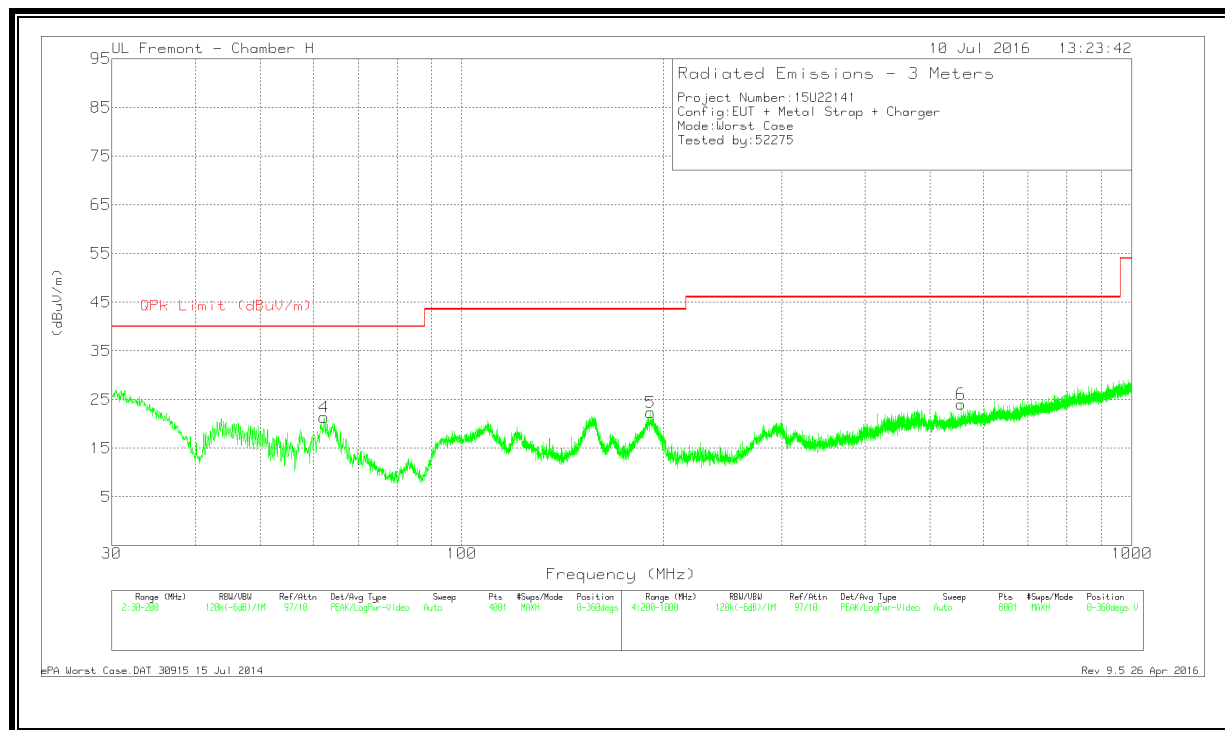
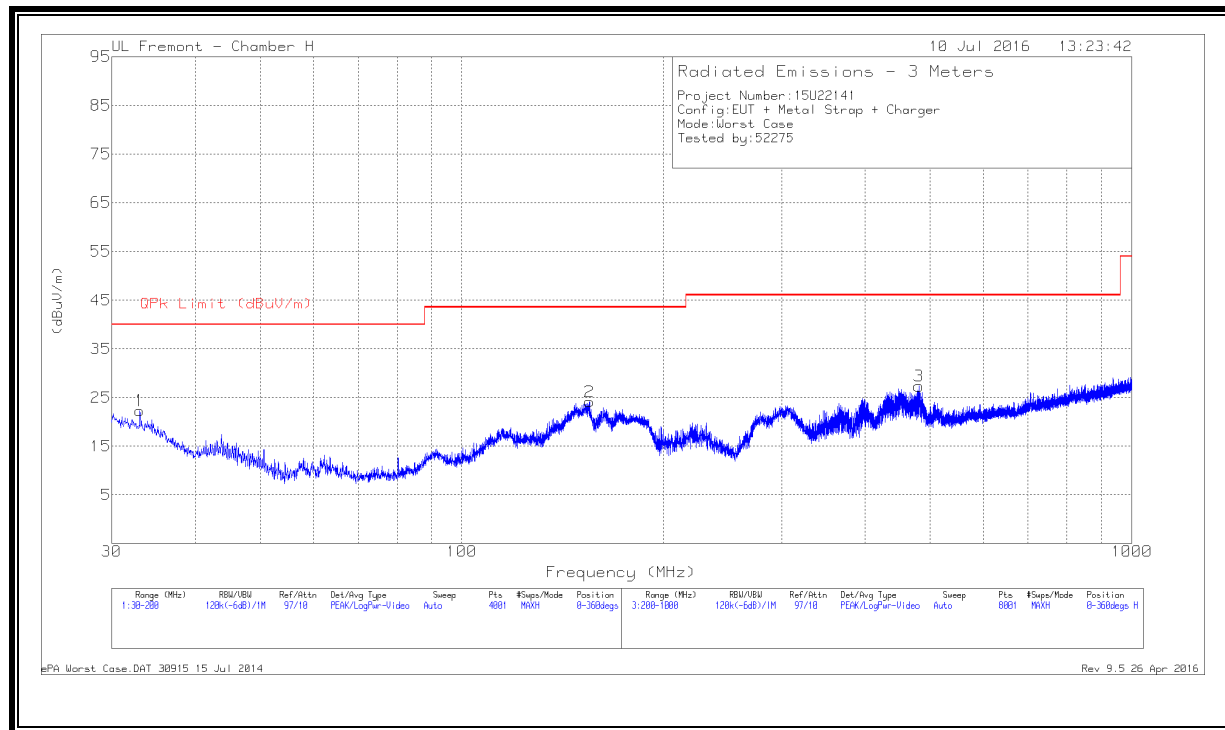
* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

PKFH - FHSS: RB=100k/1MHz VB=3 x RB, Peak

VA1T - FHSS: Linear Voltage Average VB=1/Ton where: Ton is transmit duration

8.3. WORST-CASE BELOW 1 GHz

SPURIOUS EMISSIONS 30 TO 1 GHz (WORST-CASE CONFIGURATION, HORIZONTAL & VERTICAL)



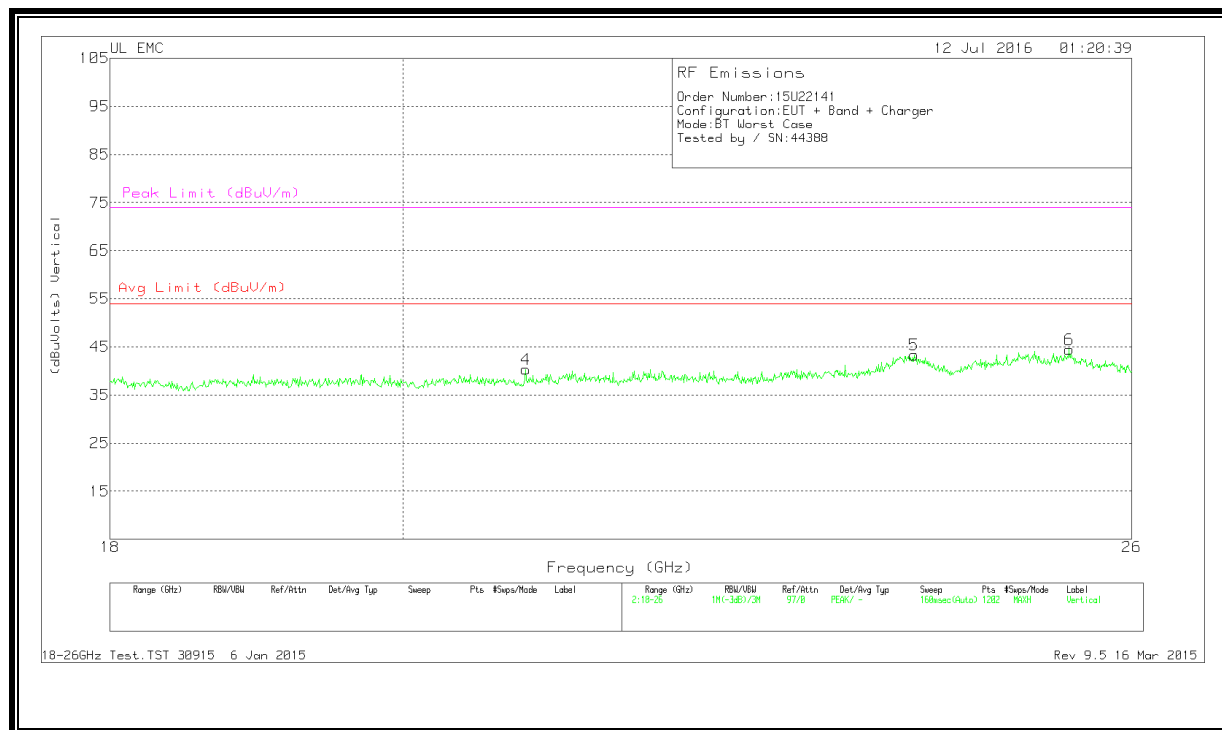
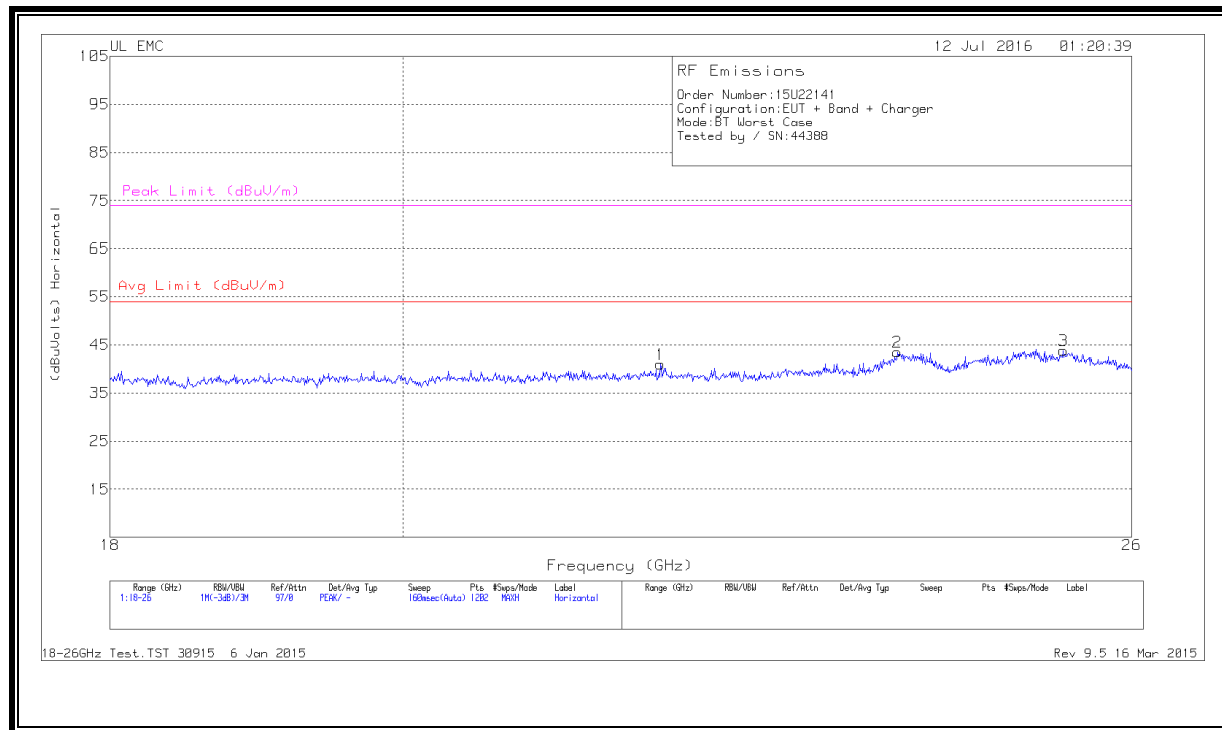
Data

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	AF T185 (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	33.06	31.03	Pk	23.1	-31.8	22.33	40	-17.67	0-360	299	H
2	155.035	38.44	Pk	16.4	-30.7	24.14	43.52	-19.38	0-360	199	H
4	62.2575	41.35	Pk	11.5	-31.5	21.35	40	-18.65	0-360	100	V
5	191.2875	37.65	Pk	15.2	-30.5	22.35	43.52	-21.17	0-360	100	V
3	481	34.76	Pk	21.7	-29.1	27.36	46.02	-18.66	0-360	199	H
6	556.3	30.55	Pk	22.4	-28.9	24.05	46.02	-21.97	0-360	100	V

Pk - Peak detector

8.4. WORST-CASE ABOVE 18 GHz

SPURIOUS EMISSIONS 18 TO 26 GHz (WORST-CASE CONFIGURATION, HORIZONTAL & VERTICAL)



Data

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T449 (dB/m)	Amp/Cbl (dB)	Dist Corr (dB)	Corrected Reading (dBuVolts)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)
1	21.943	42.4	Pk	33.4	-25.3	-9.5	41	54	-13	74	-33
2	23.895	42.8	Pk	34	-23.8	-9.5	43.5	54	-10.5	74	-30.5
3	25.367	43.63	Pk	34.3	-24.6	-9.5	43.83	54	-10.16	74	-30.16
4	20.904	41.93	Pk	33.1	-25.2	-9.5	40.33	54	-13.66	74	-33.66
5	24.042	43.33	Pk	34	-24.5	-9.5	43.33	54	-10.66	74	-30.66
6	25.42	44	Pk	34.3	-24.3	-9.5	44.5	54	-9.5	74	-29.5

Pk - Peak detector

9. AC POWER LINE CONDUCTED EMISSIONS

LIMITS

FCC §15.207 (a)

RSS-Gen 8.8

Frequency of Emission (MHz)	Conducted Limit (dBμV)	
	Quasi-peak	Average
0.15-0.5	66 to 56 *	56 to 46 *
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

TEST PROCEDURE

The EUT is placed on a non-conducting table 40 cm from the vertical ground plane and 80 cm above the horizontal ground plane. The EUT is configured in accordance with ANSI C63.10.

The receiver is set to a resolution bandwidth of 9 kHz. Peak detection is used unless otherwise noted as quasi-peak or average.

Line conducted data is recorded for both NEUTRAL and HOT lines.

RESULTS

EUT is powered by battery. AC line conducted emission is not applicable.